Service Manual

A2400

230-90353.940

ACO 9303 59471

CAL 2323 59414

PLA 5303 59470

CAL 2323 MB
Art.-N° 59414

ACO 9303 PB
Art.-N° 59471

PLA 5303 PL
Art.-N° 59470

LOEWE.

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CAUTION:

These servicing instructions are for use by qualified service personal only. To reduce the risk of electric shock do not perform any servicing other then that contained in the operating instructions unless you are qualified to do so:

Note on electrostatic shielding

1. Electrostatically shielded MOS workstations

Components sensitive to electrostatic discharge must be handled at workstation with electrostatic shielding. An electrostatically shielded MOS workstation is fitted with discharge resistor which earth all conductive materials, including the technician working there. Dielectrics are discharged by air ionisation. The use of soldering irons and measuring equipment at shielded workstation is only possible in conjunction with isolating transformer in each of the devices used. Measuring equipment chassis are also earthed with discharge resistors.

2. Shielded packaging using conductive materials

To protect against electrostatic charges, electrically conductive plastics are used for packaging and transport purposes. Conductive plastics are available in the form of transparent protective bags, foam plastic, film sheeting or containers. Sensitive components requiring the use of protective packaging must only be packed and unpacked at shielded workstations.

Safety instructions

Warning: Before servicing this chassis, read the “X-ray radiation precaution”, “Safety precaution” and “Product safety notice” instructions below.

X-ray radiation precaution

1. Excessive high voitage can produce potentially hazardous X-RAY RADIATION. To avoid such hazards, the high voltage must not be above the specified limit. The nominal value of the high voltage of this TV receiver is Ⓐ kV at zero beam current (minimum brightness) under a 120V AC power source. The high voltage must not, under any circumstances, exceed Ⓑ kV.

   Refer to table-1 for high voltage Ⓐ, Ⓑ.
   (See Adjustments procedures on page 1-13)

   Each time a TV receiver requires servicing, the high voltage should be checked following the HIGH VOLTAGE CHECK procedure in this manual. It is recommended that the reading of the high voltage be recorded as a part of the service record. It is important to use an accurate and reliable high voltage meter.
2. This TV receiver is equipped with a Fail Safe (FS) circuit which prevents the receiver from producing an excessively high voltage even if the UB voltage increases abnormally.
3. The only source of X-RAY RADIATION in this TV receiver is the picture tube. For continued X-RAY RADIATION protection, the replacement tube must be exactly the same type tube as specified in the parts list.
4. Some part in this TV receiver have special safety-related characteristics for X-RAY RADIATION protection For continued safety, parts replacement should be undertaken only after referring to the PRODUCT SAFETY NOTICE below.

Safety precaution

Warning: Service should not be attempted by anyone unfamiliar with the necessary precautions on this receiver. The fol-lowing are the necessary precautions to be observed before servicing this chassis.

1. An isolation Transformer should be connected in the power line between the TV receiver and the AC line before any service is performed on the TV receiver.
2. Always discharge the picture tube anode to the CRT conductive coating before handling the picture tube. The picture tube is highly evacuated and if broken, glass fragments will be violently expelled. Use shatter proof goggles and keep picture tube away from the unprotected body while handling.
3. When replacing a chassis in the cabinet, always be certain that all the protective devices are put back in place, such as; non-metallic control knobs, insulating covers, shields, isolation resistor-capacitor network etc.
4. The regulations of the country concerned must also be observed.

Leakage current cold check

1. Unplug the AC cord and connect a jumper between the two prongs of the plug.
2. Turn on the receiver's power switch.
3. Measure the resistance value with an ohmmeter, between the jumpered AC plug and each exposed metallic cabinet part on the receiver, such as screw heads, aerials, connectors, control shafts etc. When the exposed metallic part has a return path to the chassis the reading should be between 4 MΩ and 20 MΩ. When the exposed metal does not have are turn path to the chassis the reading must be infinite.

Leakage current hot check

1. Before returning the set to the customer, always perform an AC leakage current check on the exposed metallic parts of the cabinet, such as antennas, temminals, screwheads, metal overlays, control shafts etc to be sure the set is safe to operate without danger of electrical shock Plug the AC line cord directly into a 120V AC outlet (do not use a line isolation transformer during this check) Use an AC voltmeter having 5000 ohms per volt or more sensitivity in the following manner:
2. Connect a 2000 ohm 10 watt resistor, paralleled by a 0,15µF, AC type capacitor, between a known good earth ground (water pipe, conduit, etc.) and the exposed metallic parts, one at a time (Fig. 1). Measure the AC voltage across the combination of 2000 ohm resistor and 0,15µF capacitor. Reverse the AC plug at the AC outlet and repeat AC voltage measurements for each exposed metallic part. Voltage measured must not exceed 0,5 volts rms. This corresponds to 0,25 milliamp. AC. Any value exceeding this limit constitutes a potential shock hazard and must be corrected immediately.

AC leakage current hot check circuit

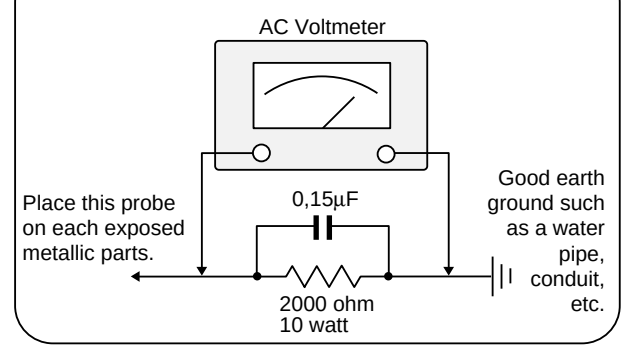

AC Voltmeter
Place this probe on each exposed metallic parts.
0,15µF
2000 ohm
10 watt
Good earth ground such as a water pipe, conduit, etc.

Fig. 1

Product safety notice

Many electrical and mechanical parts in this chassis have special safety-related characteristics. These characteristics are often passed unnoticed by a visual inspection and the protection afforded by them cannot necessarily be obtained by using replacement components rated for higher voltage, wattage. etc Replacement parts which have these special safety characteristics are identified in this manual and its supplements; electrical components having such features are identified by the international hazard symbols “⚠” on the schematic diagram and the parts list.
Before replacing any of these components, read the parts list in this manual carefully The use of substitute replacement parts which do not have the same safety characteristics as specified in the parts list may create shock fire X-ray radiation or other hazards.

Rear panel removal

Unscrew the five rear panel screws **R** to remove the rear panel. Insert screw driver into recess **V**. Depress interlocking and at the same time slide rear panel to the rear (fig. 2a).
ACO 9303 MB / Press interlocking in direction of arrows and at the same time slide rear panel to the rear (fig. 2b).

How to move the chassis into the service position

1. Hold and lift the rear of the chassis and gently pull the chassis toward you (fig. 3).
2. Undo the cable fixtures. Turn the chassis through 90°anti-clockwise and place the chassis behind the set (fig. 4).
3. After servicing ensure all wiring is returned to its original position and fixed.

Service position for the signal board

1. Remove the signal board from the main chassis (Basic board), ensuring all leads are disconnected.
2. Remove the four six (A) (fig. 5) from the plastic AV cover and unclip the AV cover from the signal board.
3. Remove the front metal cover from the signal board (fig. 6). Do the same for the rear metal cover (fig. 7).
4. Fit the three extension leads to the signal board making sure that the signal board does not touch the basic board (fig. 8).
5. After servicing ensure all wiring is returned to its original position and fixed.

Note:
The extension lead wire kit is supplied as a service kit. (Part number 3 x 396-90288.938).

Repair information for the signal board MediaPlus

There is any error on the signal board, please proceed as described:

- Remove the EAROM (I 1891) from the printed circuit board. The TV is able to keep running.
- If you get a static picture, the EAROM is out of order (possible geometry errors remain unconsidered).
- If the error is still there, it's because of another component on the signal board.
- If you want to change the signal board at the service head office, insert the EAROM from the damaged signal board into the new one. So you don't need to make the alignment and the programming of the TV set.

Important!
Please remove the AV cover at the damaged signal board.

Rear panel removal
How to move the chassis into the service position

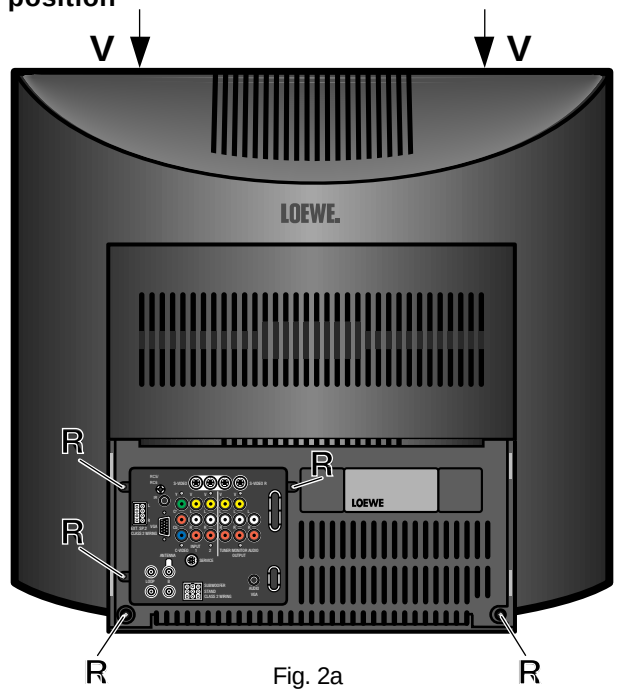


Fig. 2a

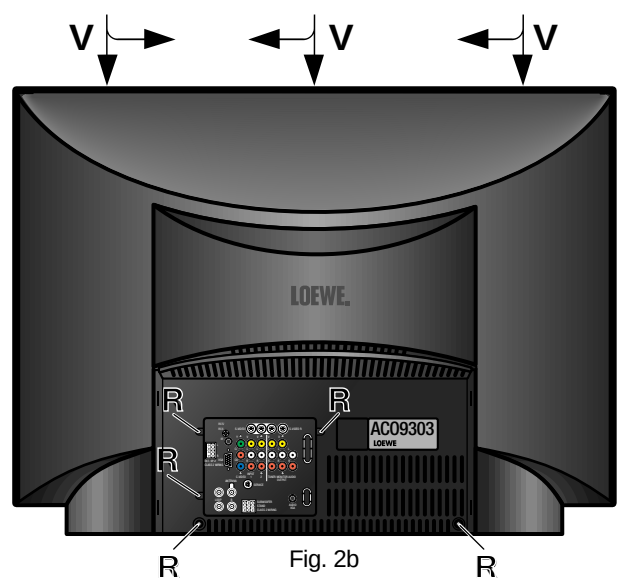


Fig. 2b

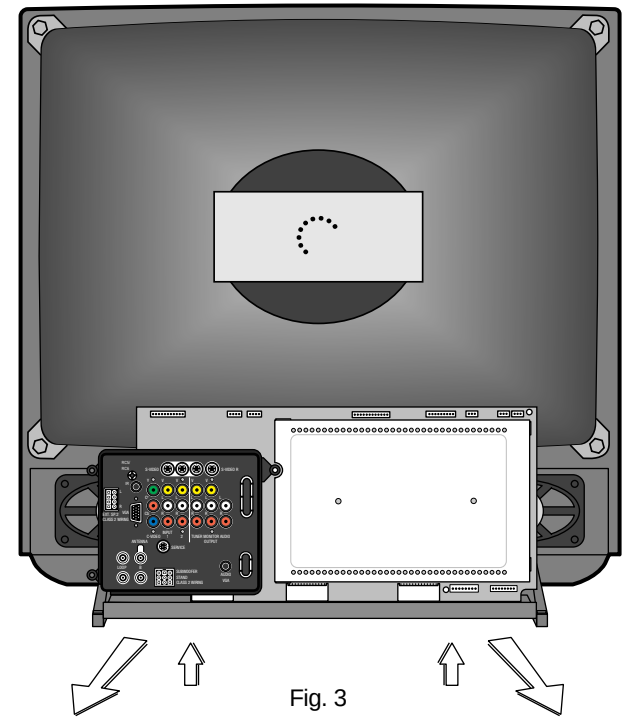


Fig. 3

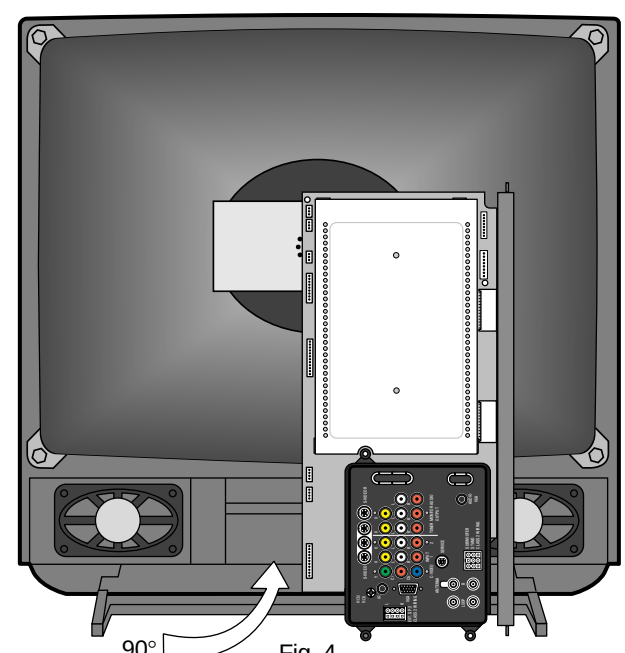


Fig. 4

Service position for the signal board

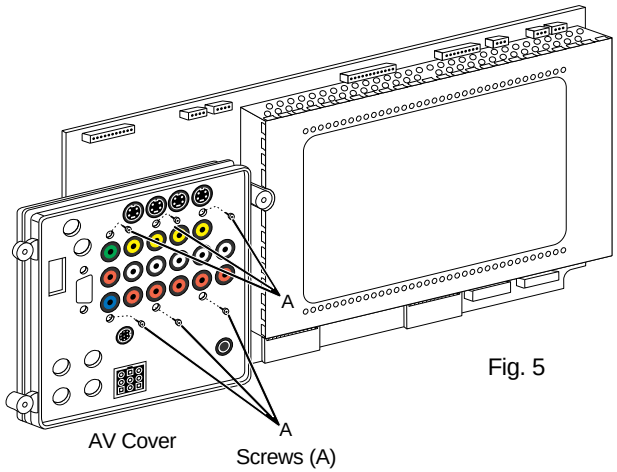
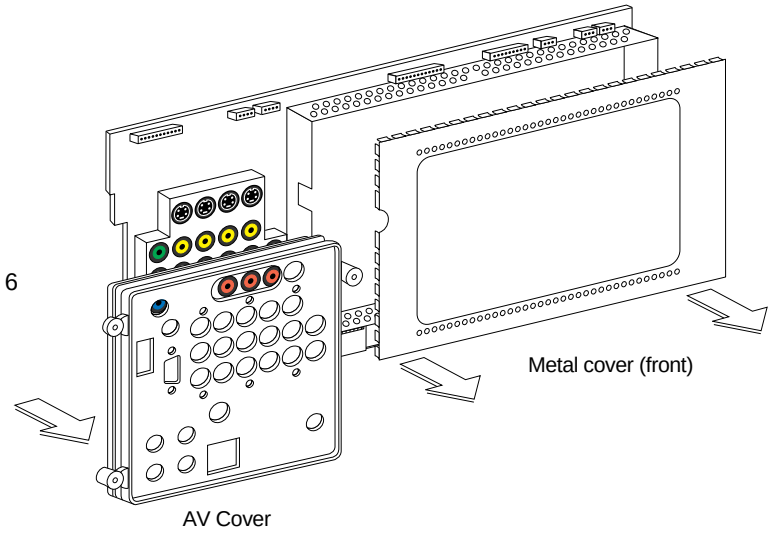


Fig. 5

Fig. 6



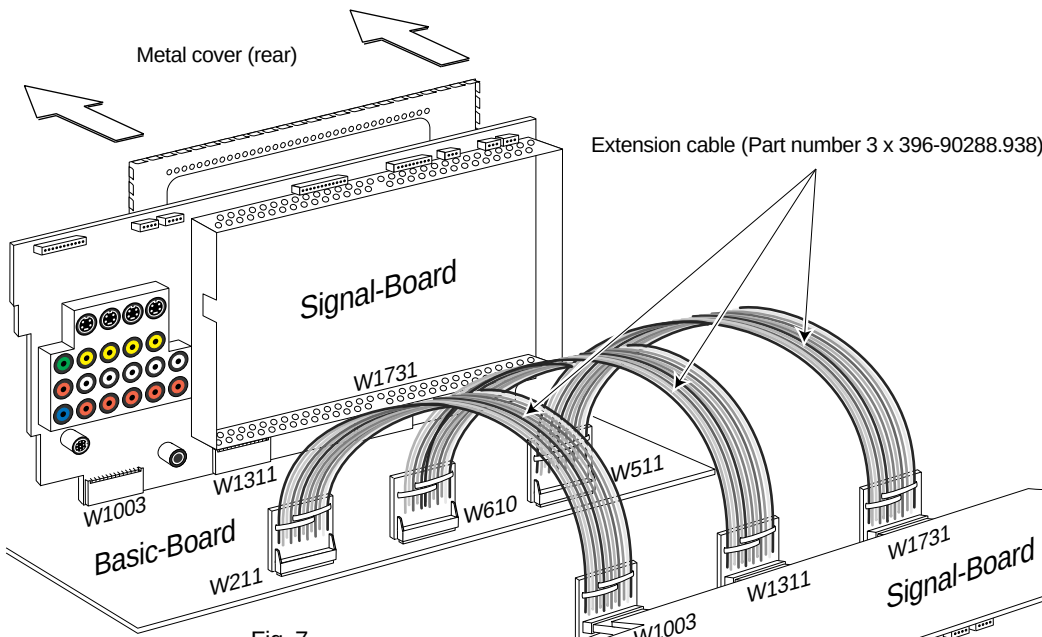


Fig. 7

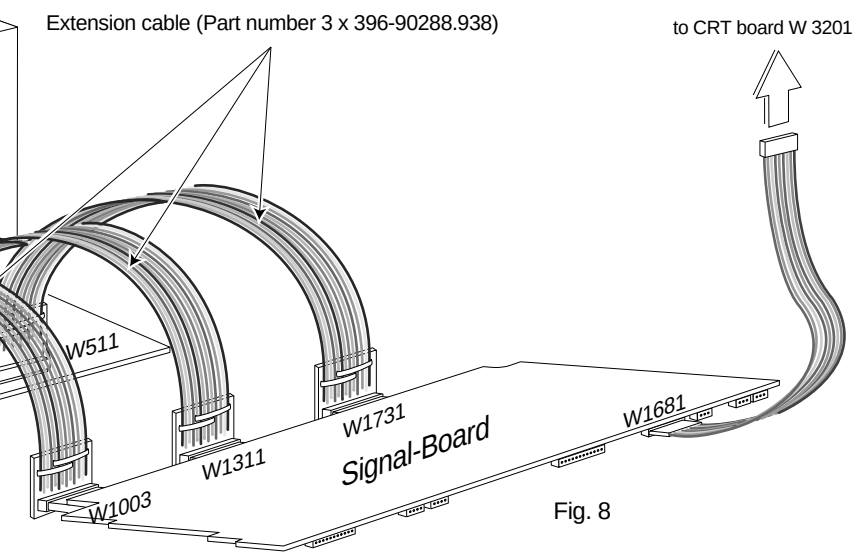


Fig. 8

Technical specifications

CAL 2323 MB
with micro digital chassis A 2400 / 8 bit

Picture tube:	Philips 33” 4:3, picture diagonal length: 84cm (visible 79cm), deflection angle 110°,
	heating voltage 6.3 Vrms (28Vp-p)/310 mA, degaussing each time the set is switched on
Power requirement:	96 to 132 V~, 60 Hz
Power consumption:	185 W (SB mode 1 W)
Vertical frequency:	60 Hz NTSC-M (progressive scan)
Horizontal freq.:	31500 Hz NTSC-M
Dimensions:	79 x 73 x 54 (W x H x D)
Weight:	54 kg
Connections	
(front):	Headphones jack with separate setting from loudspeaker, two cinch jacks for sound input, hosiden jack for video input
(back)	Input signals: S-Video (AV I & AV II), Component Video (Y, R-Y, B-Y), video/sound (AV I & AV II), VGA (synch. & RGB), Audio VGA Output signals: S-Video (AV II), video/sound (AV I Tuner), video/sound (AV II Monitor), Audio, ext. speaker 1 & 2
Features:	Dialogue control system, MTS-sound decoder, tuning and memory system digital, digital channel selector ACP, OSD indication, Sharpness Control System (SCS), DTI Plus, Automatic Volume Control AVC, Parental Lock, Digital Line Control (DLC), Digital Noise Control (DNC), Digital Line Interpolation (DLI), Automatic Movie Detection (AMD), Digital Comb Filter, Photo CD, electronic alignment with the remote control, hyperband tuner USA-PIP/hyperband tuner USA: 47 MHz - 861 MHz NTSC-M (3,58) Standard selection by means with the remote control, Closed Caption, Extented Data System (XOS)
Audio system:	2 x 40 W for an impedance of 4 ohms, 4 loudspeakers, base broadening for stereo, spatial sound for mono

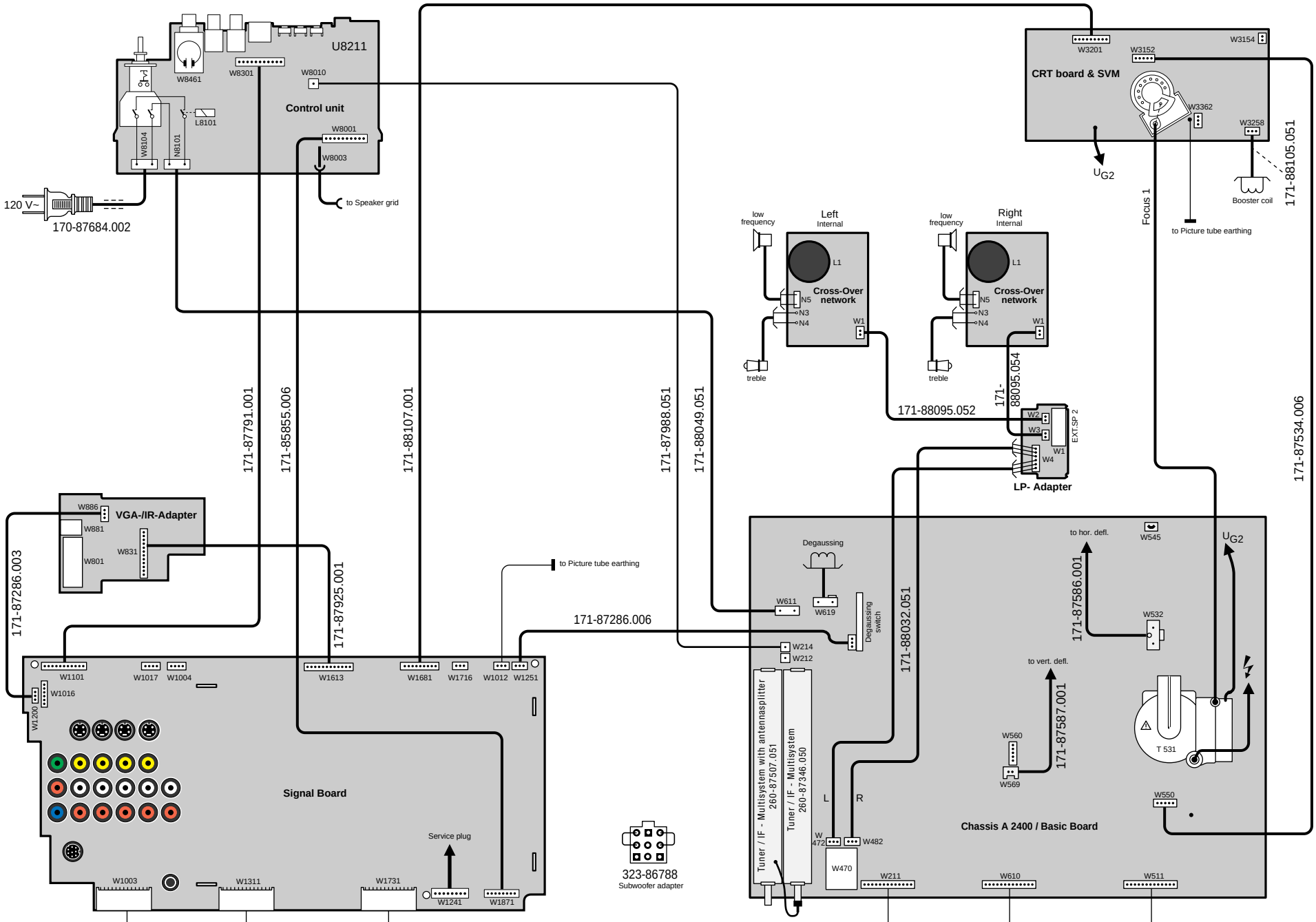
ACO 9303 MB
Technical specifications (deviating from CAL 2323MB)

Picture tube:	Philips 32” 16:9 Real Flat, picture diagonal length: 81cm (visible 76cm)
Dimensions:	85,5 x 62,5 x 57,5 (W x H x D)
Weight:	55 kg
Connections	
(front):	cinch jack for video input

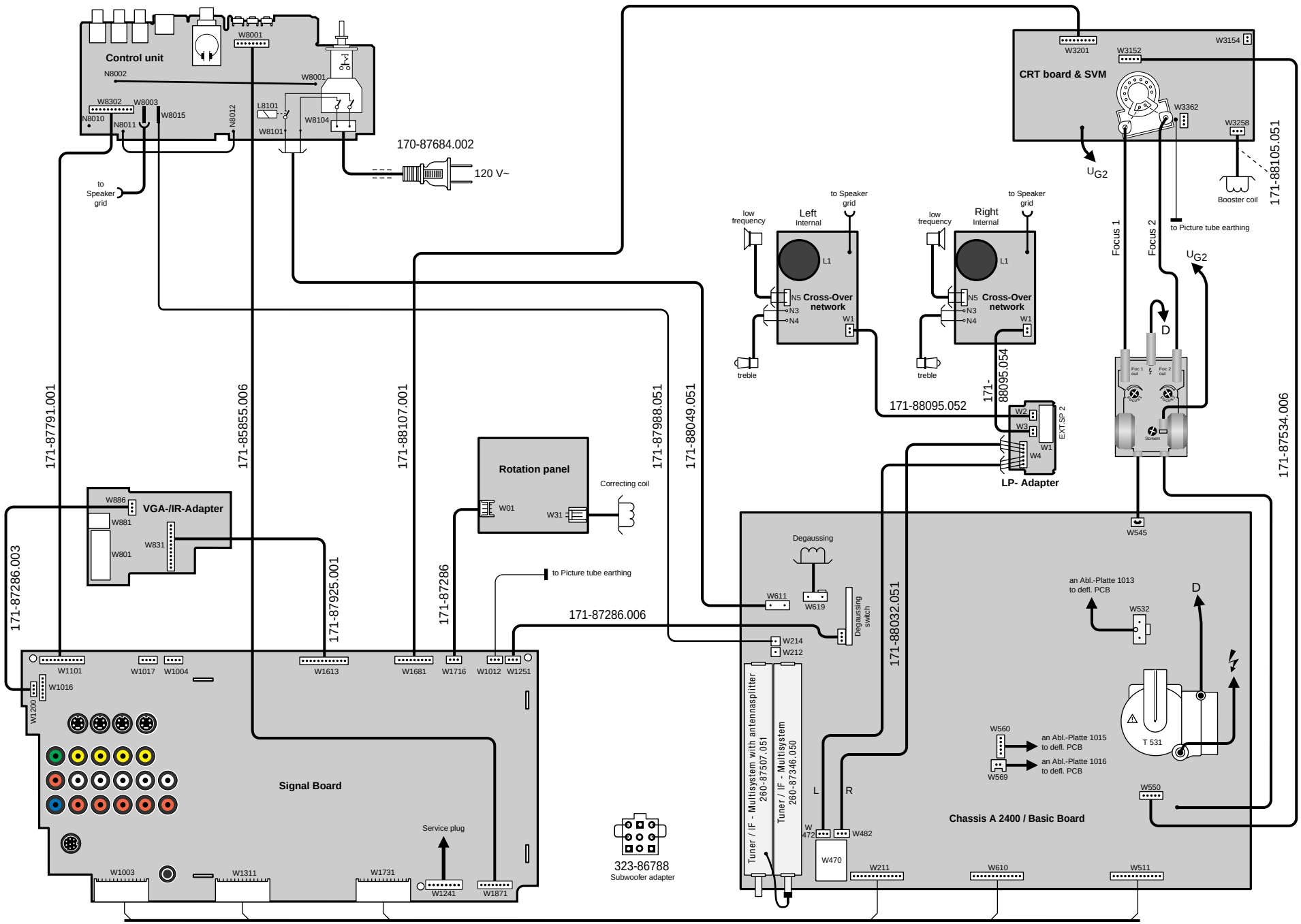
PLA 5303
Technical specifications (deviating from CAL 2323MB)

Picture tube:	Philips 32” 16:9 Real Flat, picture diagonal length 81cm (visible 76cm)
Dimensions:	99 x 59,5 x 57,5 (W x H x D)
Weight:	52,5 kg
Connections	
(front):	Cinch jack for video input
Audio system:	6 loudspeakers

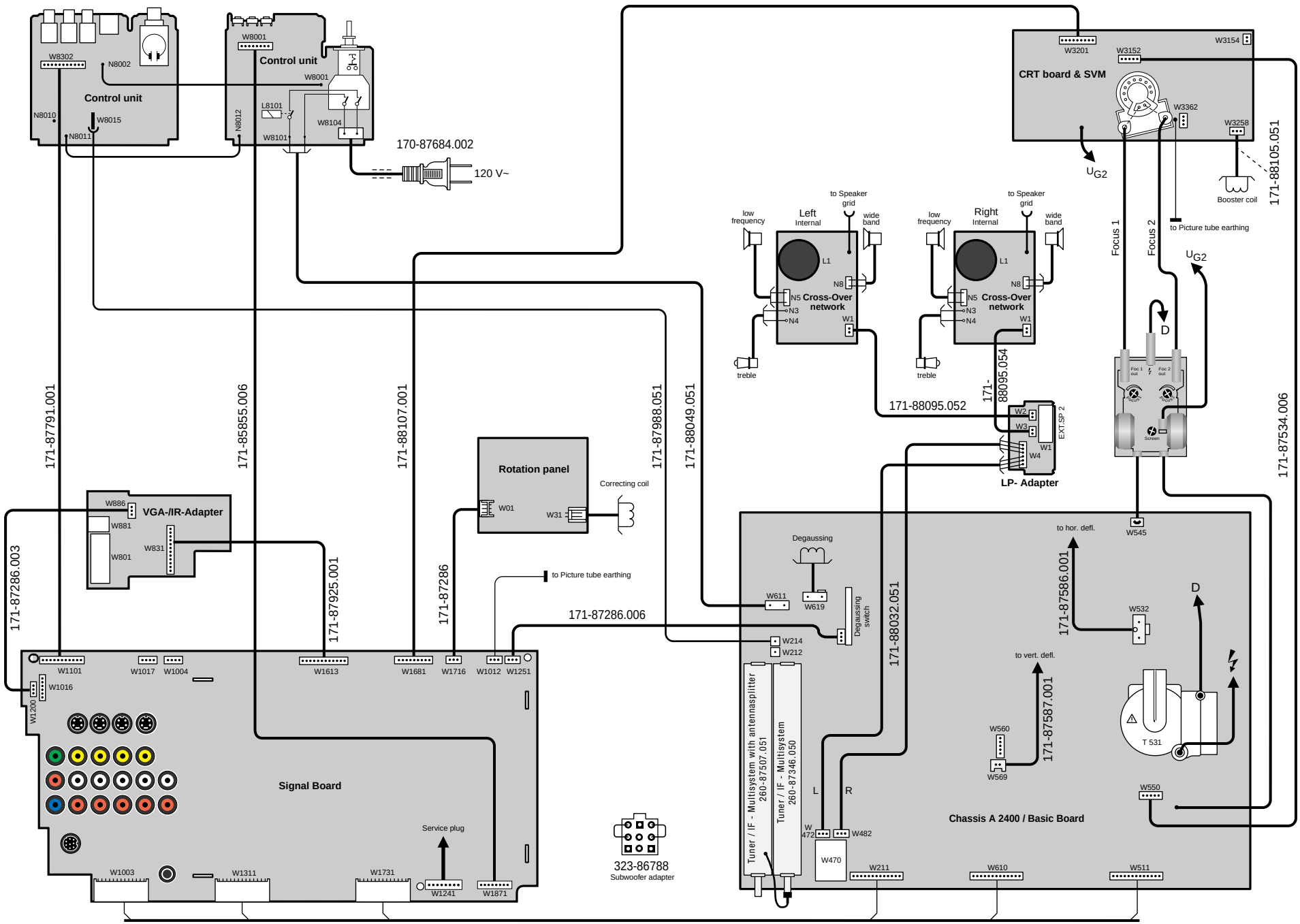
Wiring diagram • CAL 2323 MB



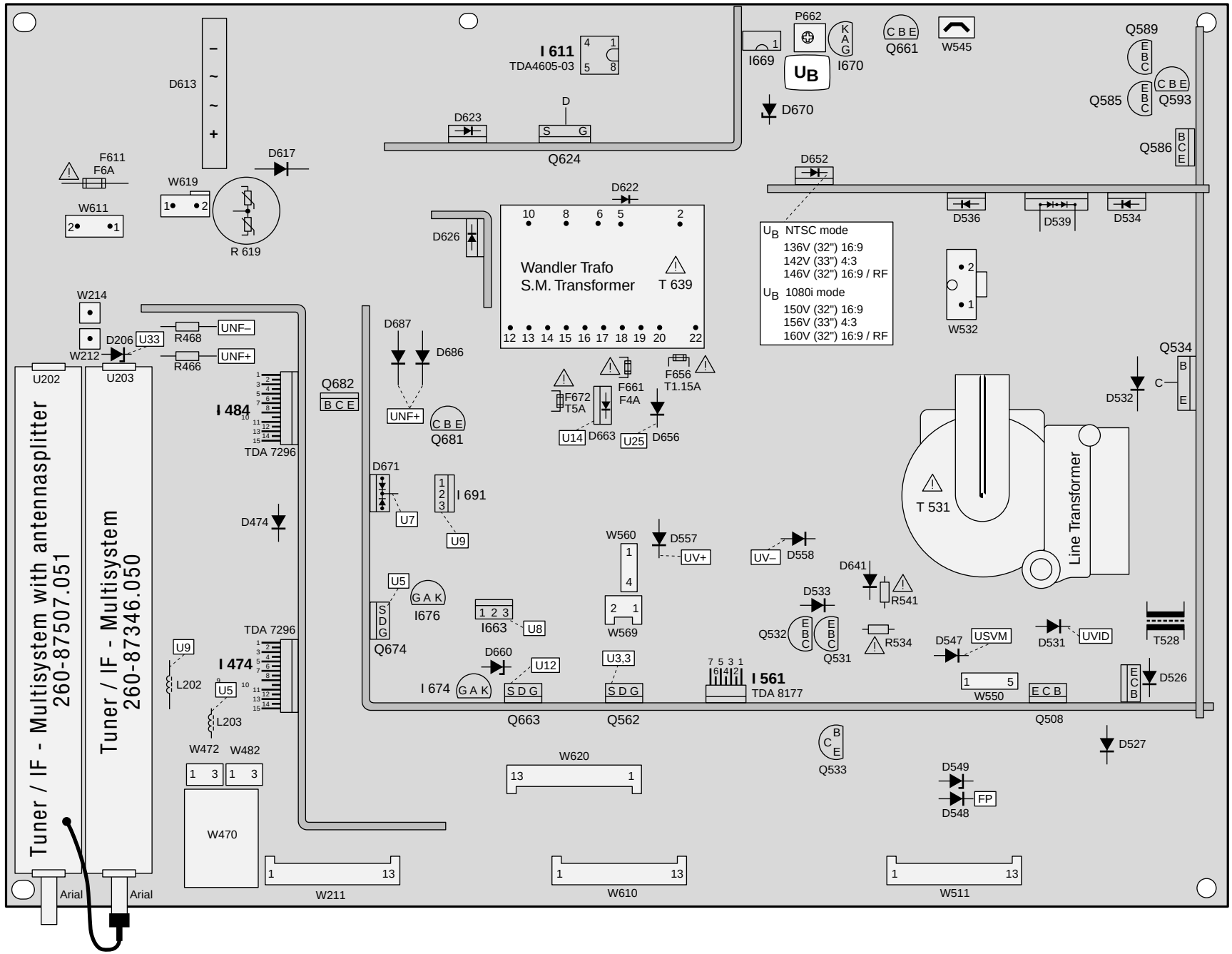
Wiring diagram • ACO 9323 MB



Wiring diagram • PLA 5303

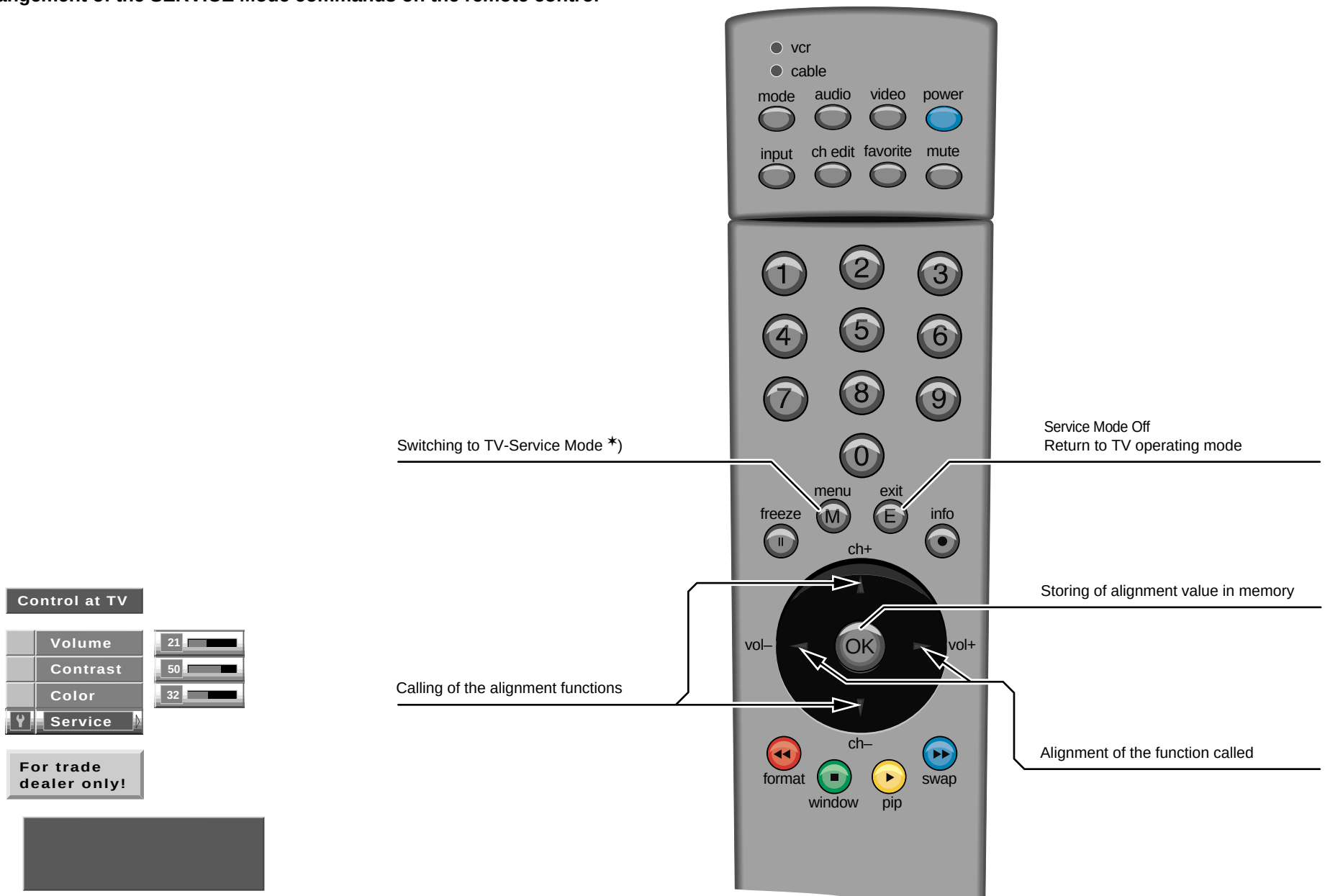


Basic Board (A 2400)



Service layout diagram **Component side**

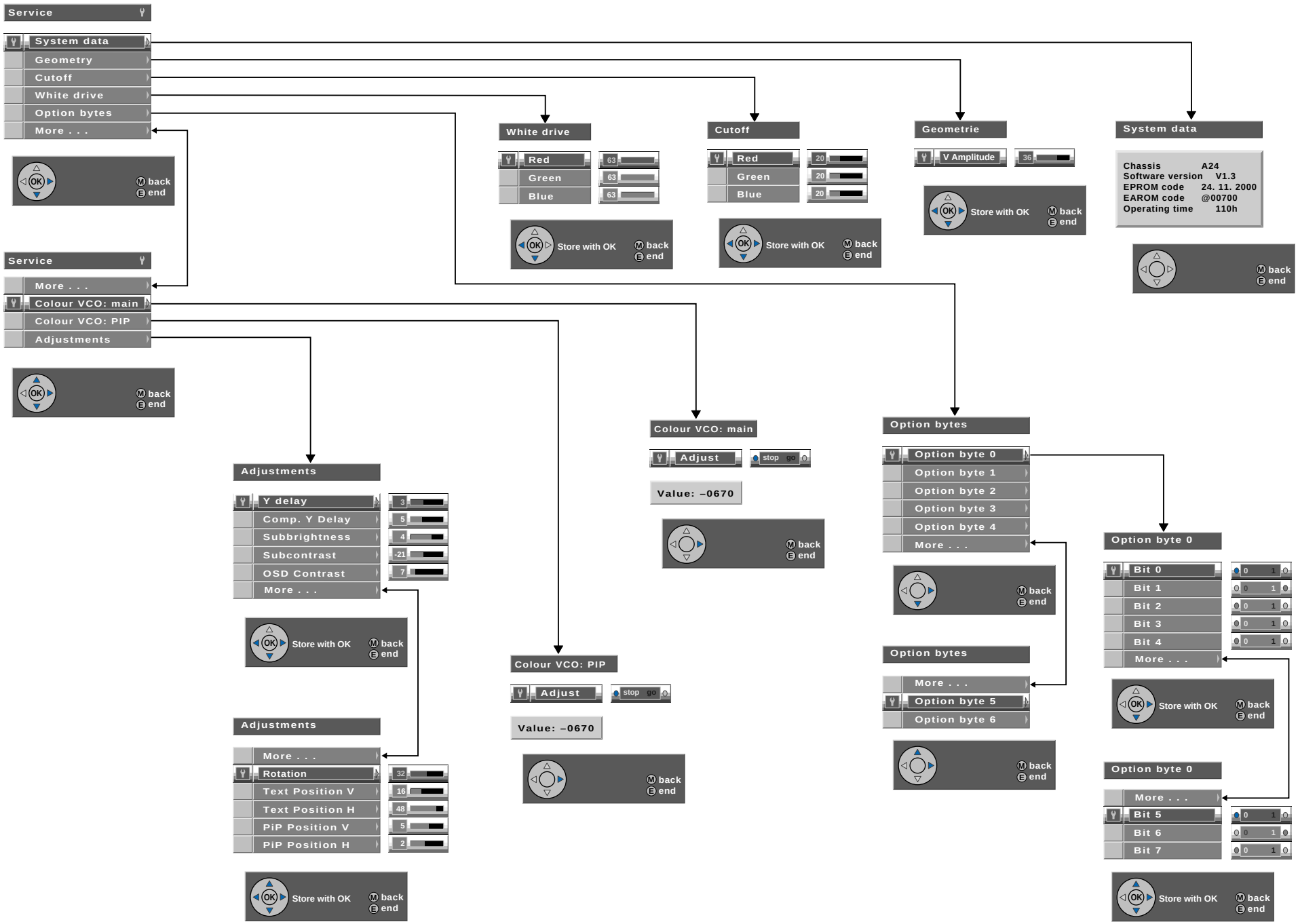
Arrangement of the SERVICE Mode commands on the remote control



Entering Service Mode

*) On the local control press function key ↻ four times (indication „Service“ will appear), afterwards within a sec. press key M on the remote control.

Service menu (A 2400)



Adjustment procedures

Service Mode A 2400 30.05.2000

High voltage at zero beam: Ⓐ	Max high voltage: Ⓑ	
Picture size	UB (NTSC Mode)	High voltage
33" / 4:3	142 V	Ⓐ 31,0 kV Ⓑ 32,0 kV
32" / 16:9	136 V	Ⓐ 33,0 kV Ⓑ 34,0 kV
32" / 16:9 Real flat	146 V	Ⓐ 33,0 kV Ⓑ 34,0 kV

Measuring UB parallel to C651

High voltage at zero beam: Ⓐ	Max high voltage: Ⓑ	
Picture size	UB (1080i Mode)	High voltage
33" / 4:3	150 V	Ⓐ 31,0 kV Ⓑ 32,0 kV
32" / 16:9	156 V	Ⓐ 33,0 kV Ⓑ 34,0 kV
32" / 16:9 Real flat	160 V	Ⓐ 33,0 kV Ⓑ 34,0 kV

Measuring UB plus pole C651 to Chasssis GND

1. Function

Service mode permits the calibration of variable EAROM values.

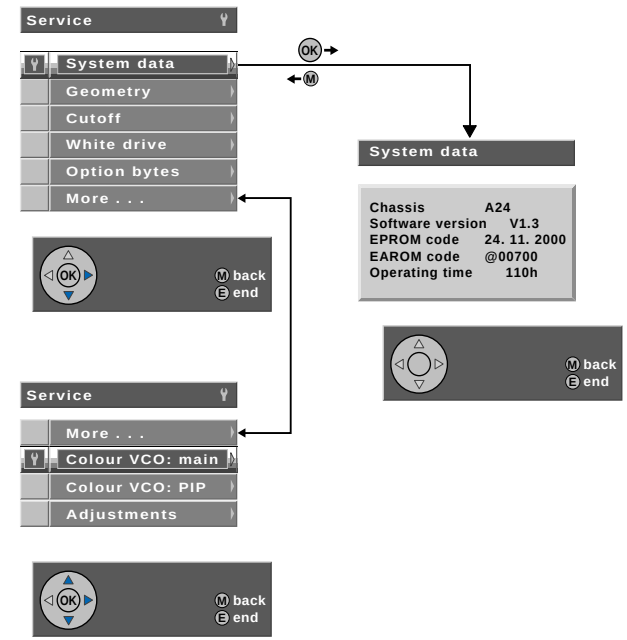
2. Entering Service Mode

The Adjustment sequence for the service mode is indicated in the pictures: “Arrangement of the service mode commands on the remote control” (p. 11).
The set is now in the service mode basic routine and documents this with the following on-screen display.

3. Instructions on Geometry Alignment

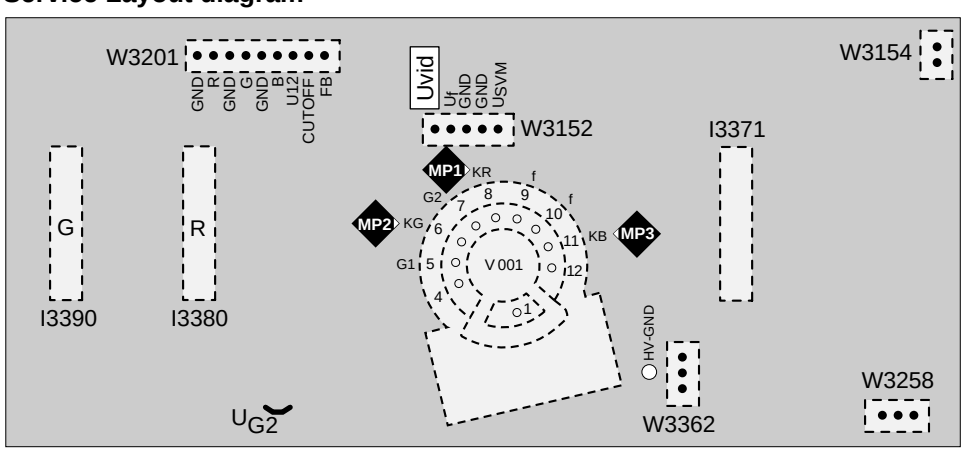
Vertical amplitude, Vertical position, Vertical linearity, Vertical symmetrie, Hor. amplitude, Hor. phase, E-W corr., Trapezium comp., etc will be adjustet separately for 50/60Hz vertical frequencies. Therefore they have to be regulated separately.

CRT:	4:3	16:9
- 50Hz - 60Hz	Test pattern: 4:3 4:3	Test pattern: 16:9 16:9



Table–1

Service Layout diagram

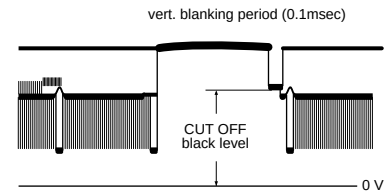


Picture tube board & SVM
Solder side

4. Alignment functions (0-12)

Alignment functions		Display - Screen e.g.	Settings / special features
0	Vertical Amplitude	Geometrie V Amplitude xx	Optimum setting Color test pattern (FuBK)
1	Vertical Position	Geometrie V Position xx	
2	Vertical Symmetry	Geometrie V Symmetry xx	
3	Vertical Linearity	Geometrie V Linearity xx	
4	Horizontal Amplitude	Geometrie H Amplitude xx	
5	Horizontal Position	Geometrie H Position xx	Separate adjustments for the various screen settings.
6	EW Amplitude	Geometrie EW Amplit. xx	Optimum settings
7	EW upper	Geometrie EW Upper xx	
8	EW lower	Geometrie EW Lower xx	
9	Trapezium Correction	Geometrie Trapezium xx	
10	Vertical Bow	Geometrie V Bow xx	
11	Vertical Angle	Geometrie V Angle xx	
12	Horizontal Offset	Geometrie H Offset xx	

5. Alignment functions (13-21)

Alignment functions		Display - Screen e.g.	Settings / special features
13a	Cutoff Measuring Pulse	Cutoff Red xx Green xx Blue xx	At colour output stage (MP1, MP2, MP3) check the highest of the displayed tension. Use Ug2 controller in DST or controller unit to adjust: Cutoff = 148 ± 2.5V DC [Before that adjustment contrast has to be set to 50, brightness to 23 and colour saturation to 32. For all 3 colours Cutoff must display 20 and White Level (14) 63! All 16:9 TV sets have to be set to 16:9 mode!] 
13b	Cutoff Reference Value	Cutoff Red xx Green xx Blue xx	In the grey area rise the missing two colours until black becomes standard, then store these values with ”OK” key.
14	White Level	White drive Red xx Green xx Blue xx	In the white area reduce the dominant two colours until black becomes standard, then store these values with ”OK” key.
15	Option bytes	Option byte 0 Bit 0 1 2 3 4 5 6 7 x x x x x x x x	Caution! Here inputs and memorizing: a) in the event of necessary repairs b) if you wish to alter programs/norms For alignment method see Option Bytes Table
16	Option bytes	Option byte 1 Bit 0 1 2 3 4 5 6 7 x x x x x x x x	
17	Option bytes	Option byte 2 Bit 0 1 2 3 4 5 6 7 x x x x x x x x	
18	Option bytes	Option byte 3 Bit 0 1 2 3 4 5 6 7 x x x x x x x x	
19	Option bytes	Option byte 4 Bit 0 1 2 3 4 5 6 7 x x x x x x x x	
20	Option bytes	Option byte 5 Bit 0 1 2 3 4 5 6 7 x x x x x x x x	
21	Option bytes	Option byte 6 Bit 0 1 2 3 4 5 6 7 x x x x x x x x	

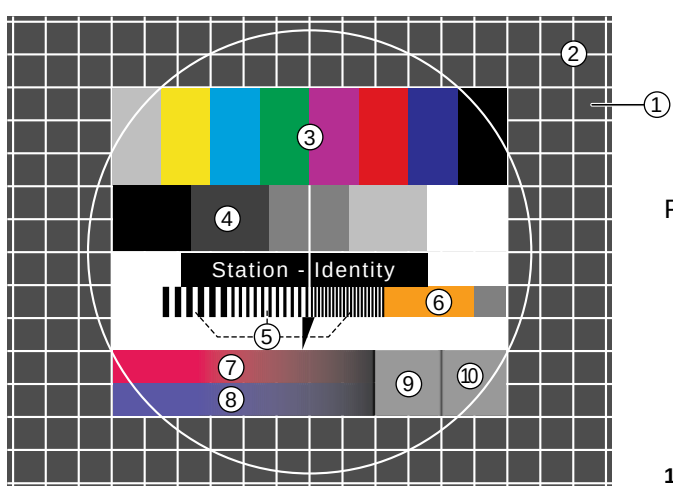
6. Alignment functions (22-37)

Alignment functions		Display - Screen e.g.	Settings / special features
22	Subcarrier Osc.	Colour VCO: main stop start	Adjust zero beat (autom. adjustment)
23	Subcarrier Osc.	Colour VCO: PIP stop start	Adjust zero beat (autom. adjustment)
24	Y Delay	Adjustments Y delay xx	Optimum settings
25	Comp. Y Delay	Adjustments Comp. Y Delay xx	
26	Brightness Offset	Adjustments Subbrightness xx	Don't adjust!
27	Subcontrast	Adjustments Subcontrast xx	
28	OSD Contrast	Adjustments OSD Contrast xx	Optimum settings
29	Rotation	Adjustments Rotation xx	
30	Vertikal Pos. TT	Adjustments Text Position V xx	
31	Horizontal Pos. TT	Adjustments Text Position H xx	
32	Vertikal Pos. PiP	Other adjustments PiP Position V xx	
33	Horizontal Pos. PiP	Adjustments PiP Position H xx	
34	EAROM Transfer via AV	Only program data From AV2 to TV stop start	Set expects external programming via EAROM programmer (Program locations)
35	EAROM Transfer via AV	Only program data From TV to AV2 stop start	Set expects external programming from TV in the EAROM programmer (Program locations)
36	EAROM Transfer via AV	All data ! From AV2 to TV stop start	Set expects external programming via EAROM programmer (all EAROM data)
37	EAROM Transfer via AV	All data ! From TV to AV2 stop start	Set expects external programming from TV in the EAROM programmer (all EAROM data)

7. Analog adjustments

Alignment functions outside the Service Mode (= analog alignment points)						
Adjustment		**Signal**	**Condition**	**Mst. point**	**Adjustments**	**Settings / special features**
1a	Operating voltage	Test pattern (NTSC Mode)	110/120V~	Screen U_B Measuring UB C651 V UB	P 662 (Basic Board)	142V ± 0,5V (33") 4:3 136V ± 0,5V (32") 16:9 146V ± 0,5V (32") 16:9 / RF If necessary correct hor. amplitude afterwards!
1b	Operating voltage	Test pattern (1080i Mode)	110/120V~	Screen U_B Measuring UB C651 V UB	P 662 (Basic Board)	150V ± 2,0V (33") 4:3 156V ± 2,0V (32") 16:9 160V ± 2,0V (32") 16:9 / RF If necessary correct hor. amplitude afterwards!
2	Focus	Test pattern		Screen	Focus at the line trans-former or controller unit	Optimum settings

Colour test pattern (FuBK)



Picture components

1) Grey field (30% white)
2) Grid network (15 hor.- 19 vert. Line)
3) Colour bar (75% white, yellow, cyan, green, purple, red, blue, black)
4) Shade of grey (0-25-50-75-100% white)
5) Frequency group (1-2-3 MHz)
6) Orange field (4,43 MHz/Phase G-Y=0)
7) Red wedge (±V Sawtooth)
8) Blue wedge (+U Sawtooth)
9) Grey field (+V)
10) Grey field (±U)

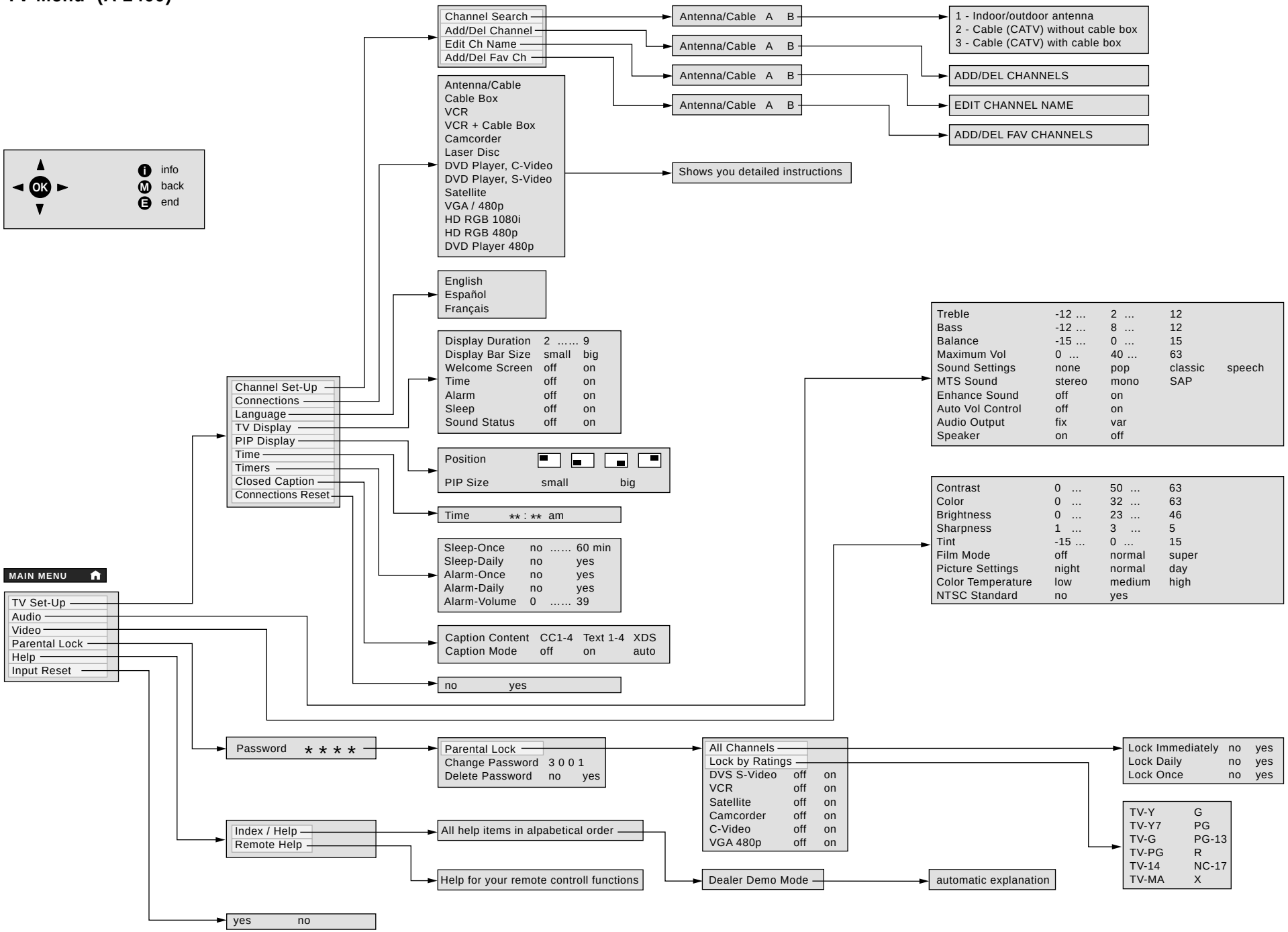
Option Byte Table

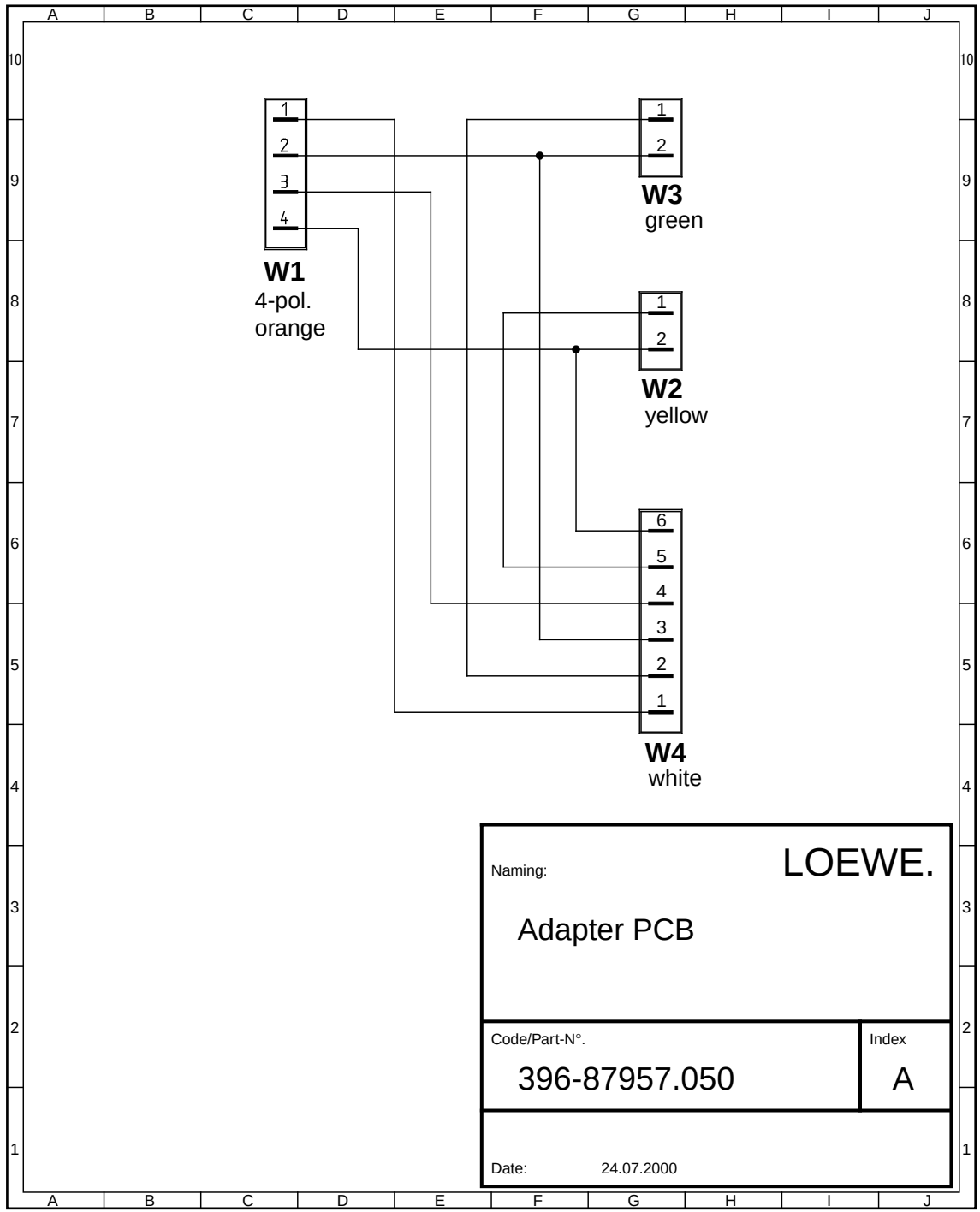
Alignement function	Bit-Nr. N°.	Meaning	"0"	"1"	Adjusted in the factory		
					CAL 33"	PLA 32"	ACO 32"
					4:3	16:9	16:9/RF
Byte 0	0	HDLC	Timeout	No Timeout	0	0	0
	1	Synch slicer threshold	not written	written	0	0	0
	2	Read sidepanel from	PROM (new BESIC)	EAROM	1	1	1
	3	free	—	—	0	0	0
	4	Available TV-Mode	480 lines proscan	960 lines interlace	0	0	0
	5	Blue picture w/o signal	yes	no	0	0	0
	6	VGA Modul	yes	no	0	0	0
	7	VGA switch	delayed	undelayed	1	1	1
Byte 1	0	Timer controlled prg switch	yes	no	0	0	0
	1	Auto YC on AV input	yes	no	0	0	0
	2	Text mode	black backround	drop shadow	0	0	0
	3	Close caption	enhanced attr. off	enhanced attr. on	0	0	0
	4	PIP	frame mode	field mode	0	0	0
	5	16:9 sets and PIP on	pan/cin/zoom possible	pan/cin/zoom impossible	0	0	0
	6	Auto PAL/NTSC via AV	no	yes	0	0	0
	7	Side panels	from VPC	from BESIC	1	1	1
Byte 2	0	Auto color PAL/NTSC	only NTSC	always on (only for fafactory use)	0	0	0
	1	Indicate movie mode	no	yes	0	0	0
	2	Lock Mode VPC	no	via side panel color	0	0	0
	3	Blanking program switch	yes	no	0	0	0
	4	VCR headjump meas line (VPC)	normal (line 5)	modified (line 3)	0	0	0
	5	AGC memory	off	on	1	1	1
	6	Reaction of del commands	fast	slow	0	0	0
	7	Auto movie source detect.	disabled	enabled	1	1	1

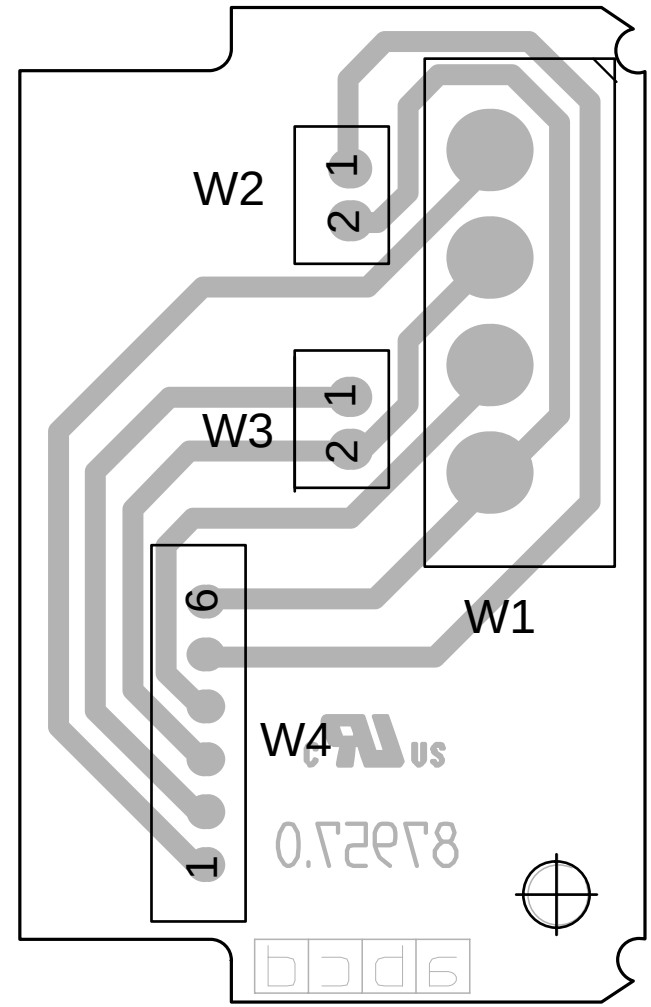
Option Byte Table

Alignement function	Bit-Nr. N°.	Meaning	"0"	"1"	Adjusted in the factory		
					CAL 33"	PLA 32"	ACO 32"
					4:3	16:9	16:9/RF
Byte 3	0	Default aspect ratio	enabled	disabled	1	1	1
	1	Picture size	4:3	16:9	0	1	1
	2	Rotations coil	no	yes	0	1	1
	3	Split screen vert. delay	disabled	enabled	0	0	0
	4	Switch-off autom. (w/o Sync)	yes	no	0	0	0
	5	Warm up mode	off	on	0	0	0
	6	free	—	—	0	0	0
	7	First switch on	no	yes	1	1	1
Byte 4	0	Sound ident info OSD active	no	yes (only for test)	0	0	0
	1	Auto volume control (AVC)	slow	fast	0	0	0
	2	50Hz progressive scan	disabled	enabled	0	0	0
	3	60Hz progressive scan	disabled	enabled	1	1	1
	4	Auto movie detect (AMD)	fast	slow	1	1	1
	5	Warm up mode	on	off	1	1	1
	6	Chroma inverter BESIC	on	off	0	0	0
	7	free	—	—	0	0	0
Byte 5	0	Scan velocity modulation	disabled	enabled	1	1	1
	1	Welcome screen	from EPROM	from EAROM	0	0	0
	2	Output selected	monitor	tuner	0	0	0
	3	Basic board	Q2460	Q2400	0	0	0
	4	VGA synch switching	old	new	1	1	1
	5	Values for upconversion	automatic	manual recursion	0	0	0
	6	Input locking source	input 1	VGA	0	0	0
	7	Input locking	off	on	0	0	0
Byte 6	0	Gamma-settings (1080i)	from EAROM	from EPROM	0	0	0
	1-7	free	—	—	0	0	0

TV Menu (A 2400)

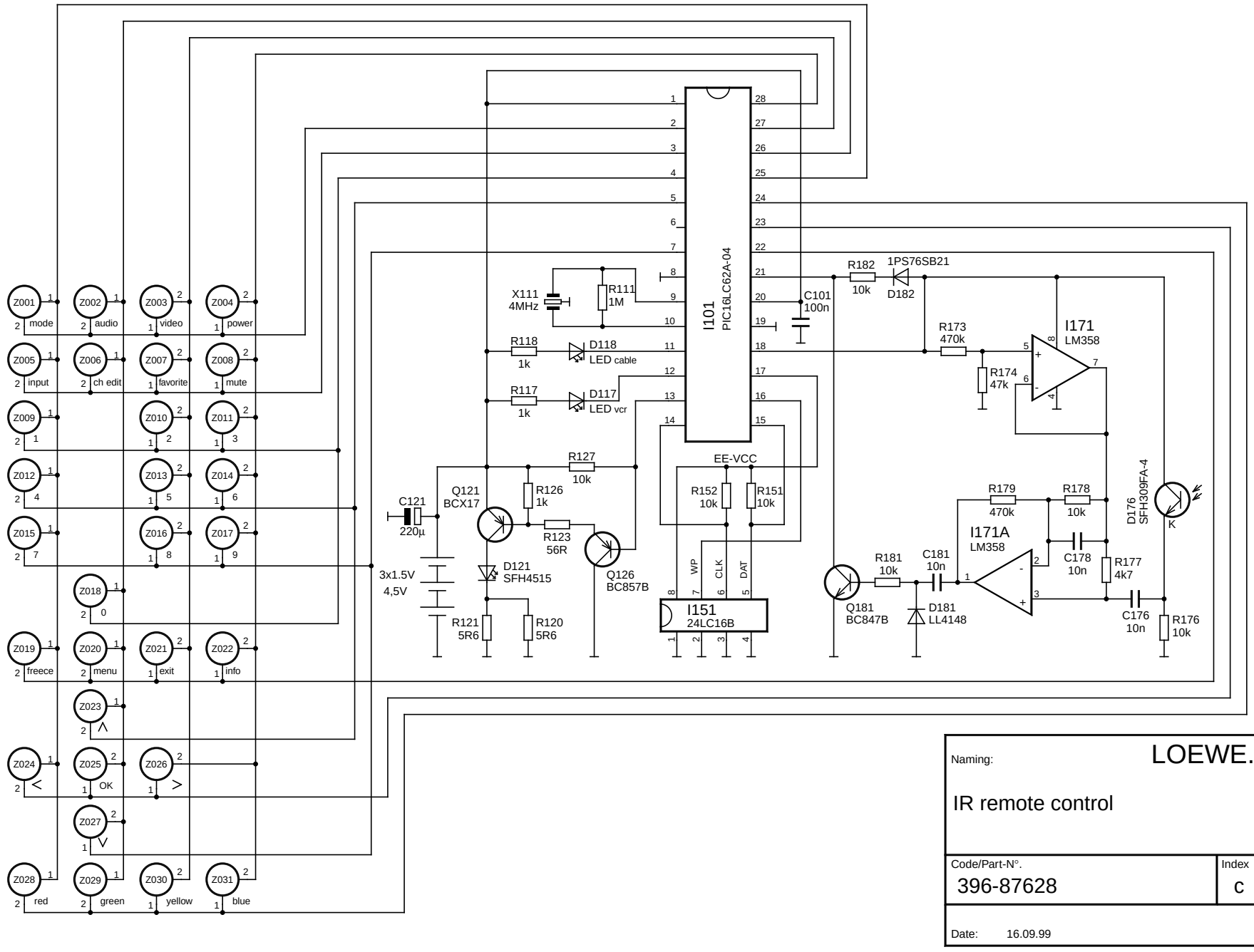






Adapter PCB 396-87957A

Components side



Naming: LOEWE.

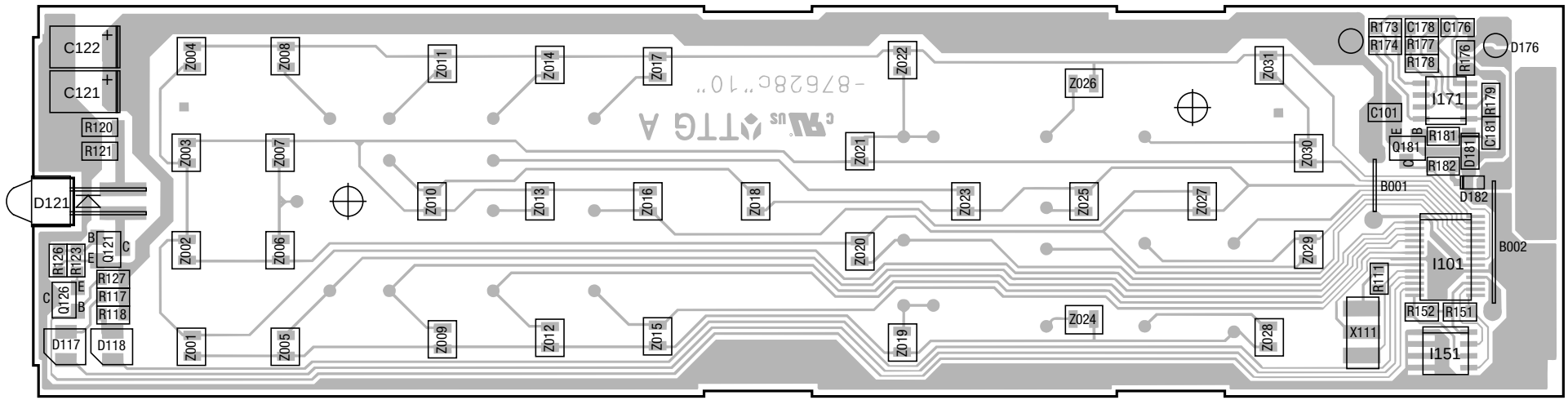
IR remote control

Code/Part-N°. 396-87628

Index c

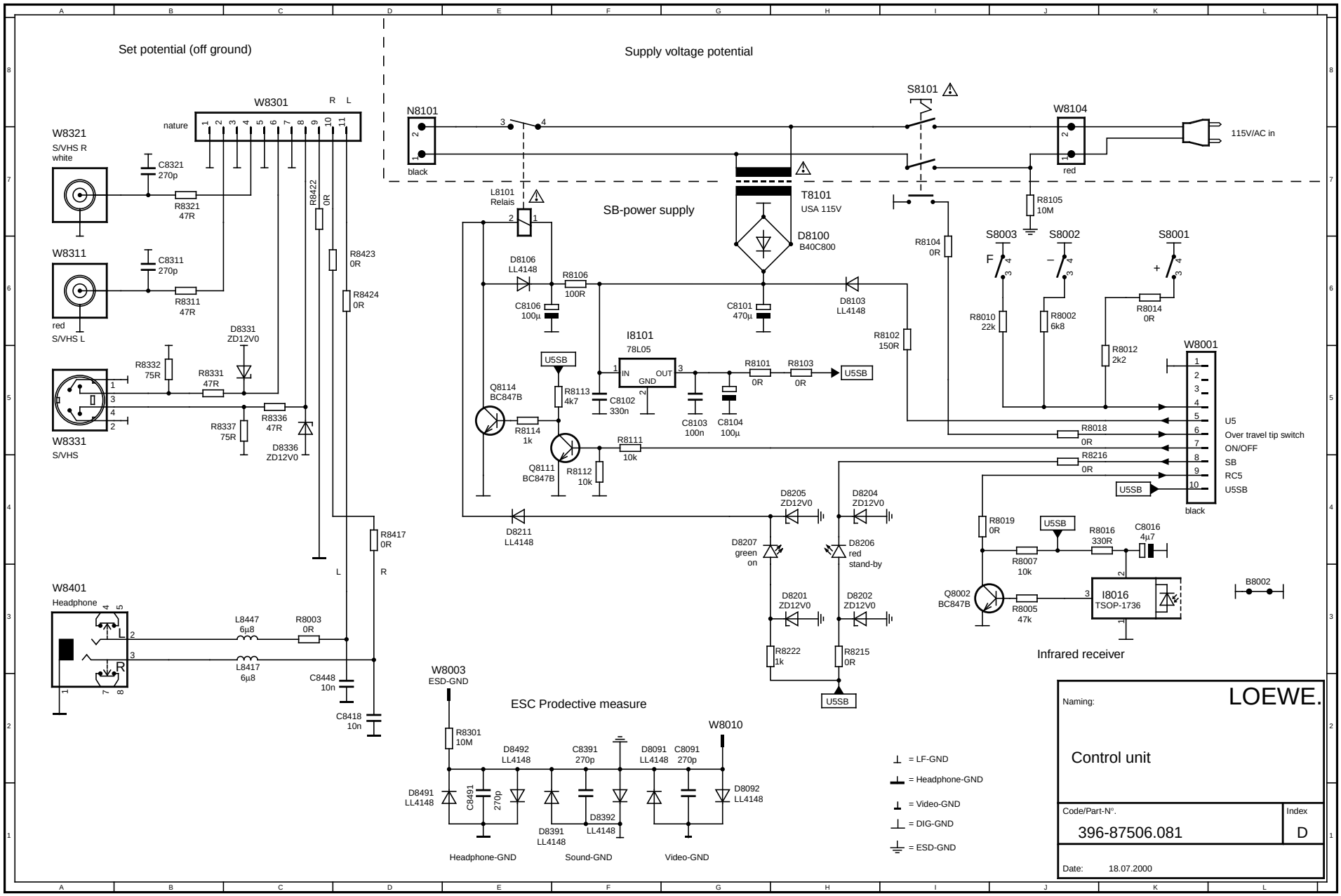
Date: 16.09.99

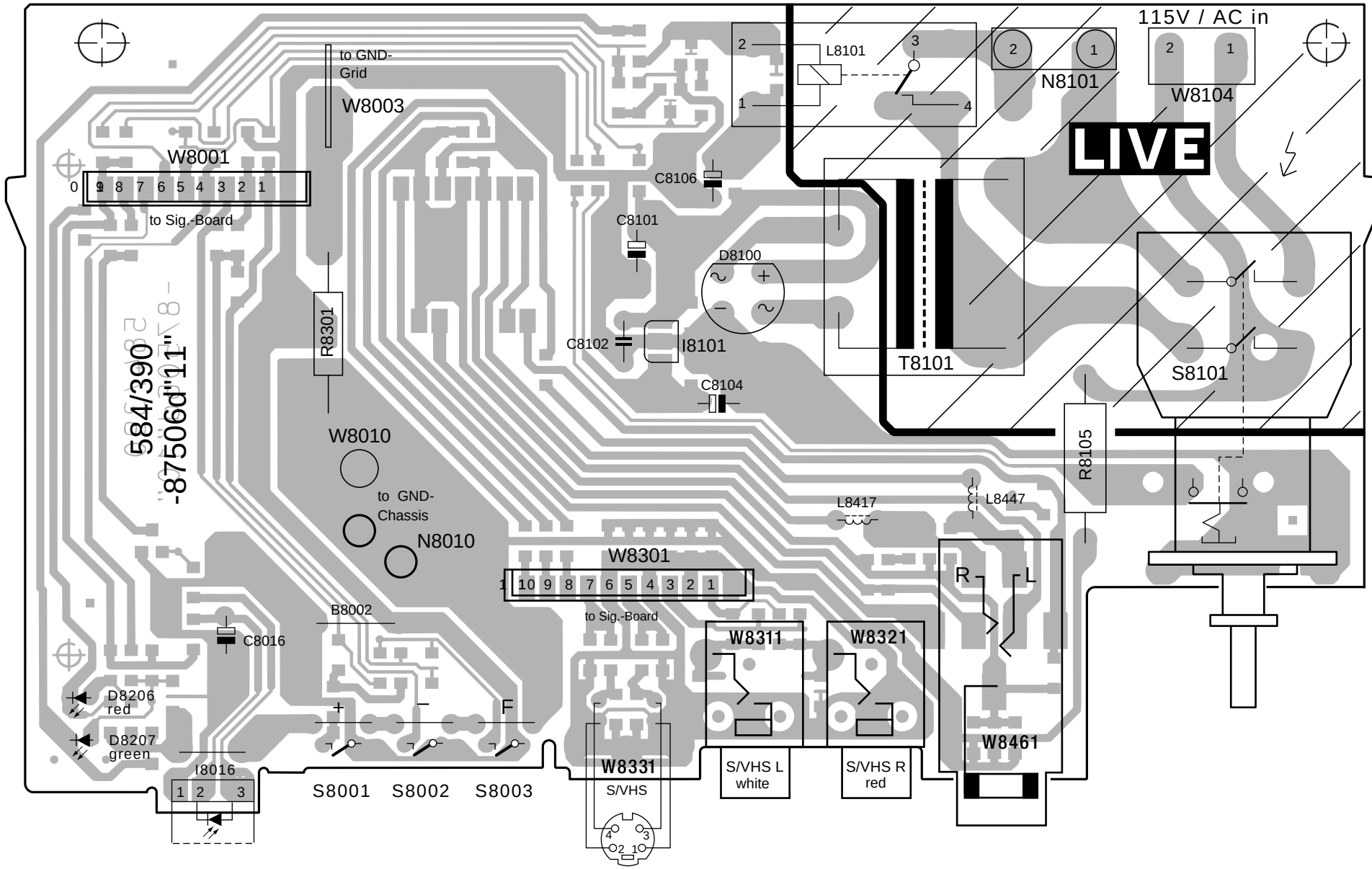
Infrared remote handset ”Control USA” 263-87000.063



Infrared remote control PCB 396-87628C

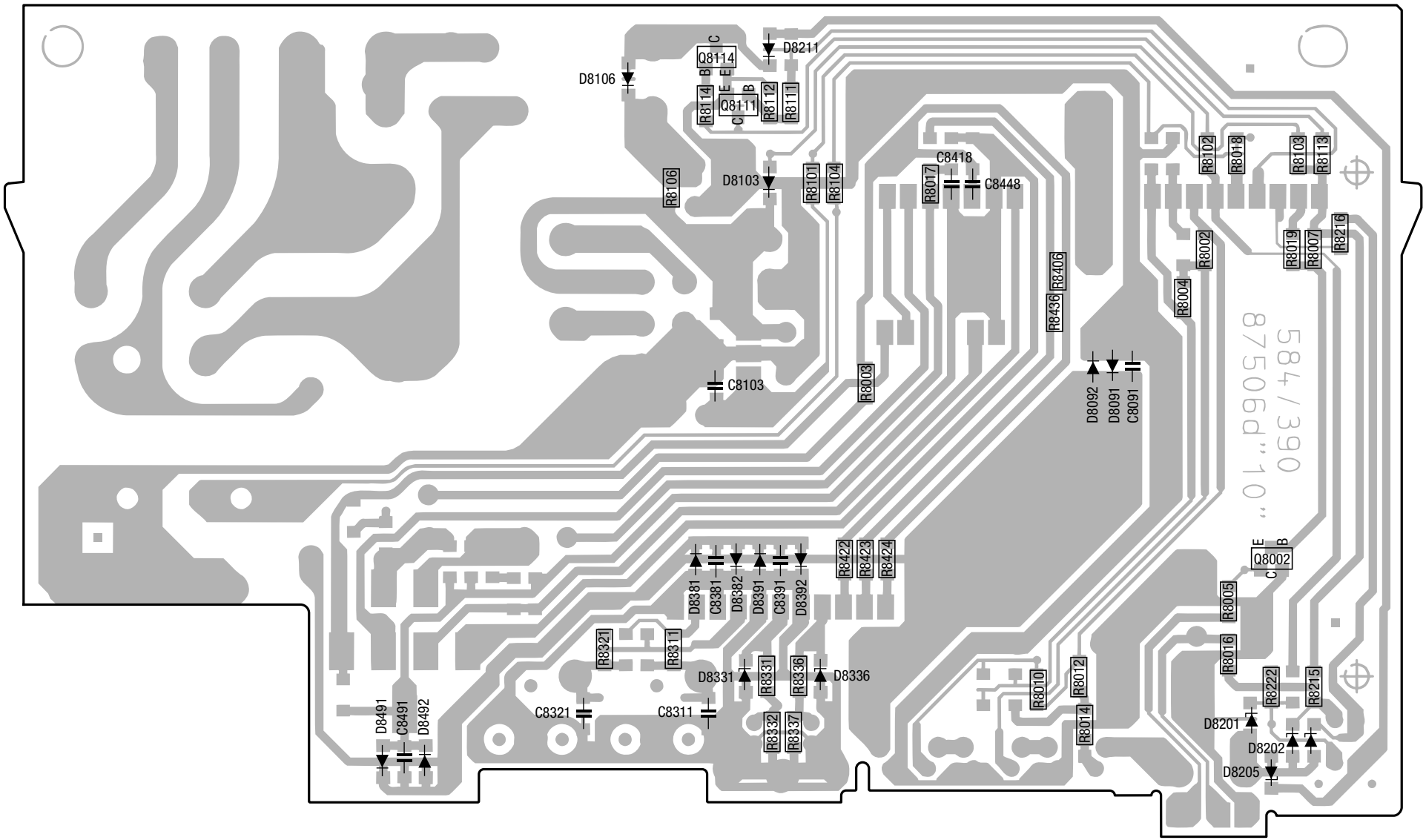
Components side


Set potential (off ground)
Supply voltage potential
W8301
R L
nature
W8321
S/VHS R
white
C8321
270p
R8321
47R
W8311
C8311
270p
R8311
47R
red
S/VHS L
W8331
S/VHS
R8332
75R
R8331
47R
D8331
ZD12V0
R8337
75R
R8336
47R
D8336
ZD12V0
R8422
0R
R8423
0R
R8424
0R
R8417
0R
L
R
W8401
Headphone
L8447
6µ8
L8417
6µ8
R8003
0R
C8448
10n
C8418
10n
N8101
black
S8101
W8104
red
115V/AC in
L8101
Relais
SB-power supply
T8101
USA 115V
D8100
B40C800
R8105
10M
R8104
0R
S8003
S8002
S8001
F
–
+
R8010
22k
R8002
6k8
R8014
0R
R8012
2k2
W8001
black
U5
Over travel tip switch
ON/OFF
SB
RC5
U5SB
D8106
LL4148
R8106
100R
C8106
100µ
C8101
470µ
D8103
LL4148
R8102
150R
I8101
78L05
IN
GND
OUT
U5SB
R8101
0R
R8103
0R
C8102
330n
C8103
100n
C8104
100µ
Q8114
BC847B
R8113
4k7
R8114
1k
Q8111
BC847B
R8112
10k
R8111
10k
R8018
0R
R8216
0R
D8211
LL4148
D8205
ZD12V0
D8204
ZD12V0
D8207
green
on
D8206
red
stand-by
D8201
ZD12V0
D8202
ZD12V0
R8222
1k
R8215
0R
R8019
0R
R8007
10k
R8016
330R
C8016
4µ7
Q8002
BC847B
R8005
47k
I8016
TSOP-1736
B8002
Infrared receiver
W8003
ESD-GND
ESC Prodective measure
W8010
R8301
10M
D8492
LL4148
C8391
270p
D8091
LL4148
C8091
270p
D8491
LL4148
C8491
270p
D8391
LL4148
D8392
LL4148
D8092
LL4148
Headphone-GND
Sound-GND
Video-GND
= LF-GND
= Headphone-GND
= Video-GND
= DIG-GND
= ESD-GND
Naming:
LOEWE.
Control unit
Code/Part-N°.
396-87506.081
Index
D
Date:
18.07.2000



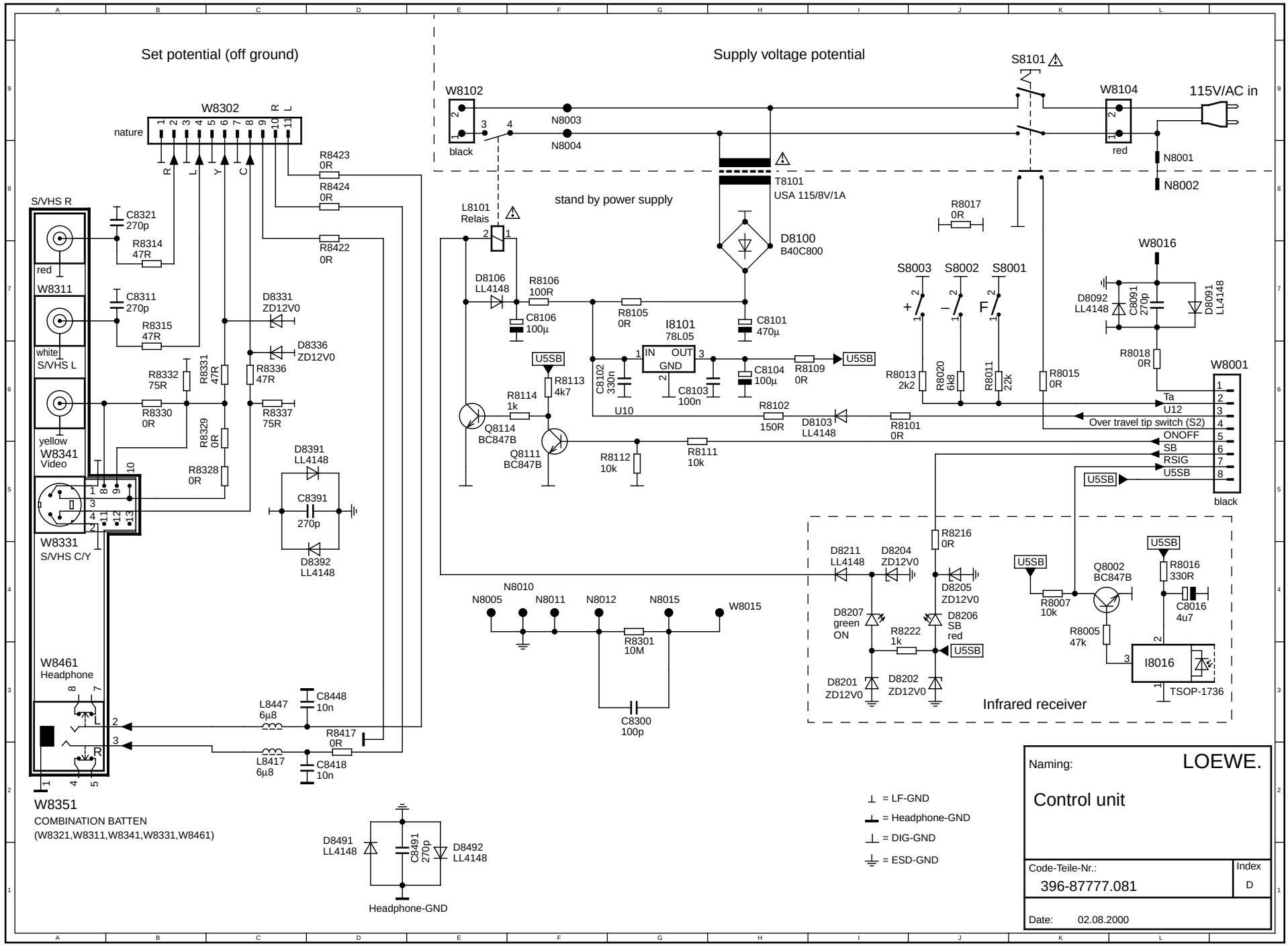
Control Board **396-87506.050**

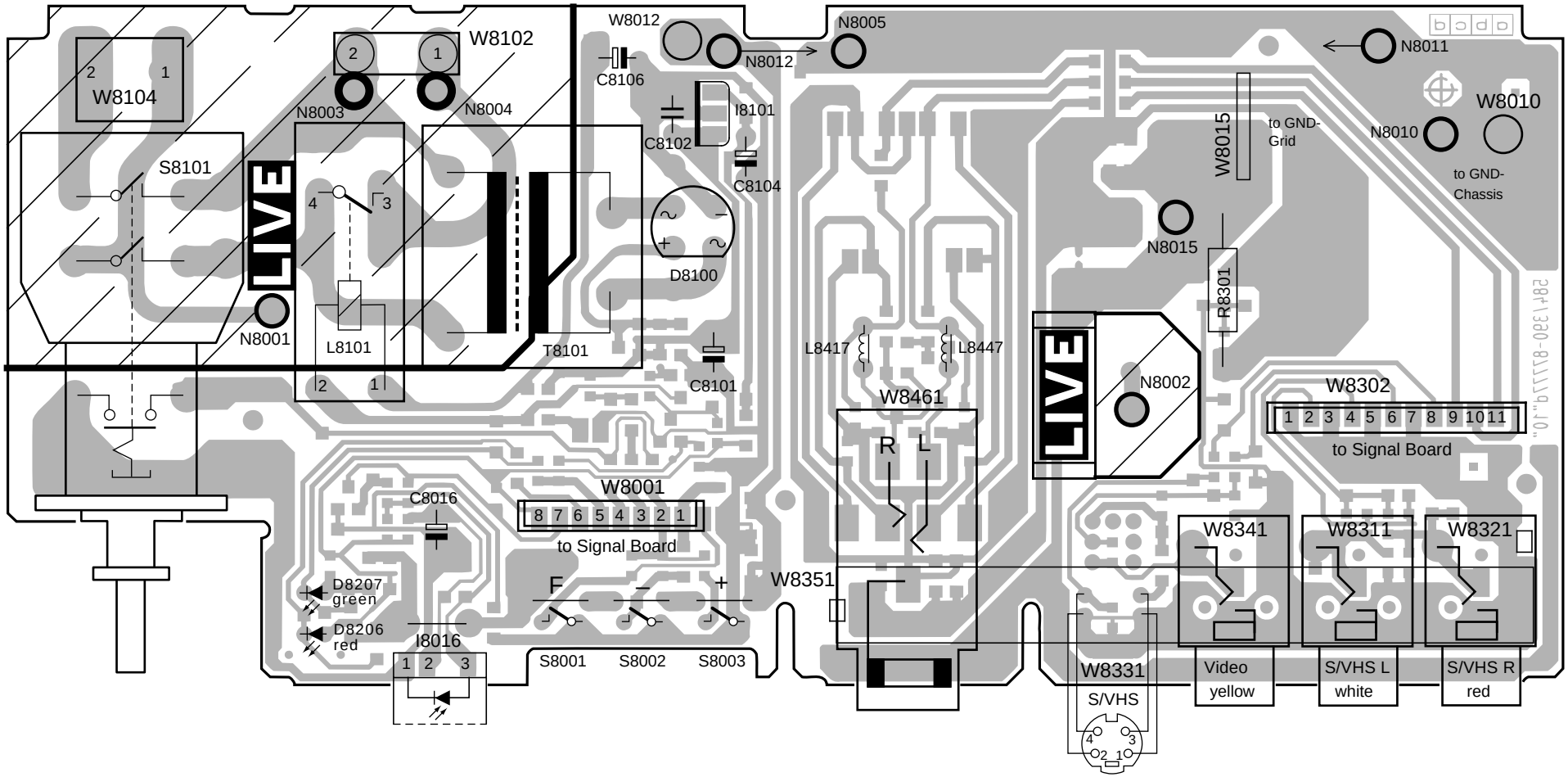
Components side



Control Board **396-87506.081**

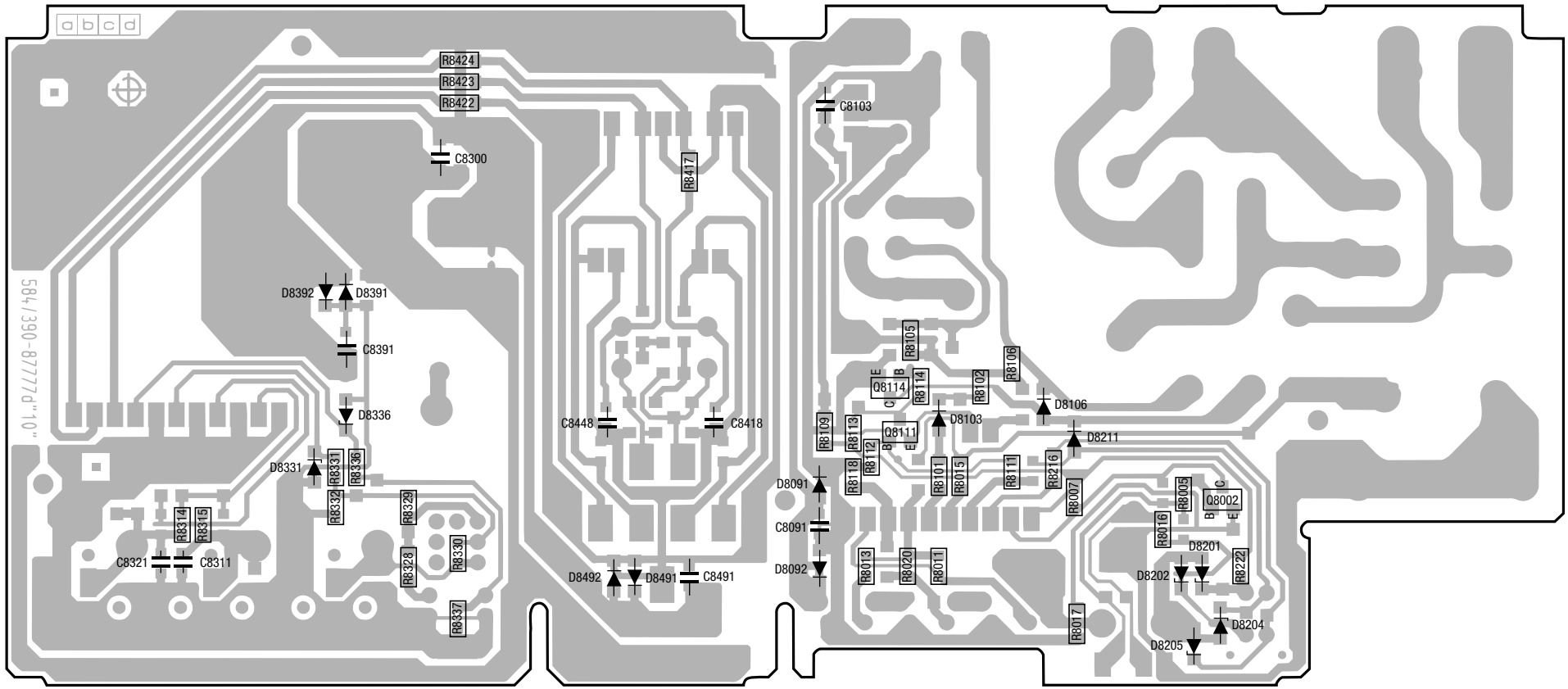
Solder side


Set potential (off ground)
Supply voltage potential
W8302
nature
R
L
Y
C
R8423 0R
R8424 0R
R8422 0R
S/VHS R
red
W8311
C8321 270p
R8314 47R
C8311 270p
R8315 47R
D8331 ZD12V0
D8336 ZD12V0
white
S/VHS L
R8332 75R
R8331 47R
R8336 47R
R8330 0R
R8337 75R
yellow
W8341
Video
R8329 0R
R8328 0R
D8391 LL4148
C8391 270p
D8392 LL4148
W8331
S/VHS C/Y
W8461
Headphone
L8447 6µ8
C8448 10n
R8417 0R
L8417 6µ8
C8418 10n
W8351
COMBINATION BATTEN
(W8321,W8311,W8341,W8331,W8461)
D8491 LL4148
C8491 270p
D8492 LL4148
Headphone-GND
W8102
black
N8003
N8004
S8101
W8104
115V/AC in
red
N8001
N8002
T8101
USA 115/8V/1A
stand by power supply
L8101
Relais
D8100
B40C800
R8017 0R
W8016
S8003
S8002
S8001
D8092 LL4148
C8091 270p
D8091 LL4148
D8106 LL4148
R8106 100R
R8105 0R
C8106 100µ
I8101
78L05
C8101 470µ
R8018 0R
W8001
U5SB
C8102 330n
C8103 100n
C8104 100µ
R8109 0R
R8113 4k7
R8114 1k
Q8114 BC847B
Q8111 BC847B
R8112 10k
R8111 10k
U10
R8102 150R
D8103 LL4148
R8101 0R
R8013 2k2
R8020 6k8
R8011 22k
R8015 0R
Ta
U12
Over travel tip switch (S2)
ONOFF
SB
RSIG
U5SB
black
N8010
N8005
N8011
N8012
N8015
W8015
R8301 10M
C8300 100p
D8211 LL4148
D8204 ZD12V0
R8216 0R
D8205 ZD12V0
D8207 green ON
D8206 SB red
R8222 1k
D8201 ZD12V0
D8202 ZD12V0
R8007 10k
Q8002 BC847B
R8016 330R
C8016 4u7
R8005 47k
I8016
TSOP-1736
Infrared receiver
⊥ = LF-GND
= Headphone-GND
⊥ = DIG-GND
= ESD-GND
Naming:
LOEWE.
Control unit
Code-Teile-Nr.:
396-87777.081
Index
D
Date:
02.08.2000

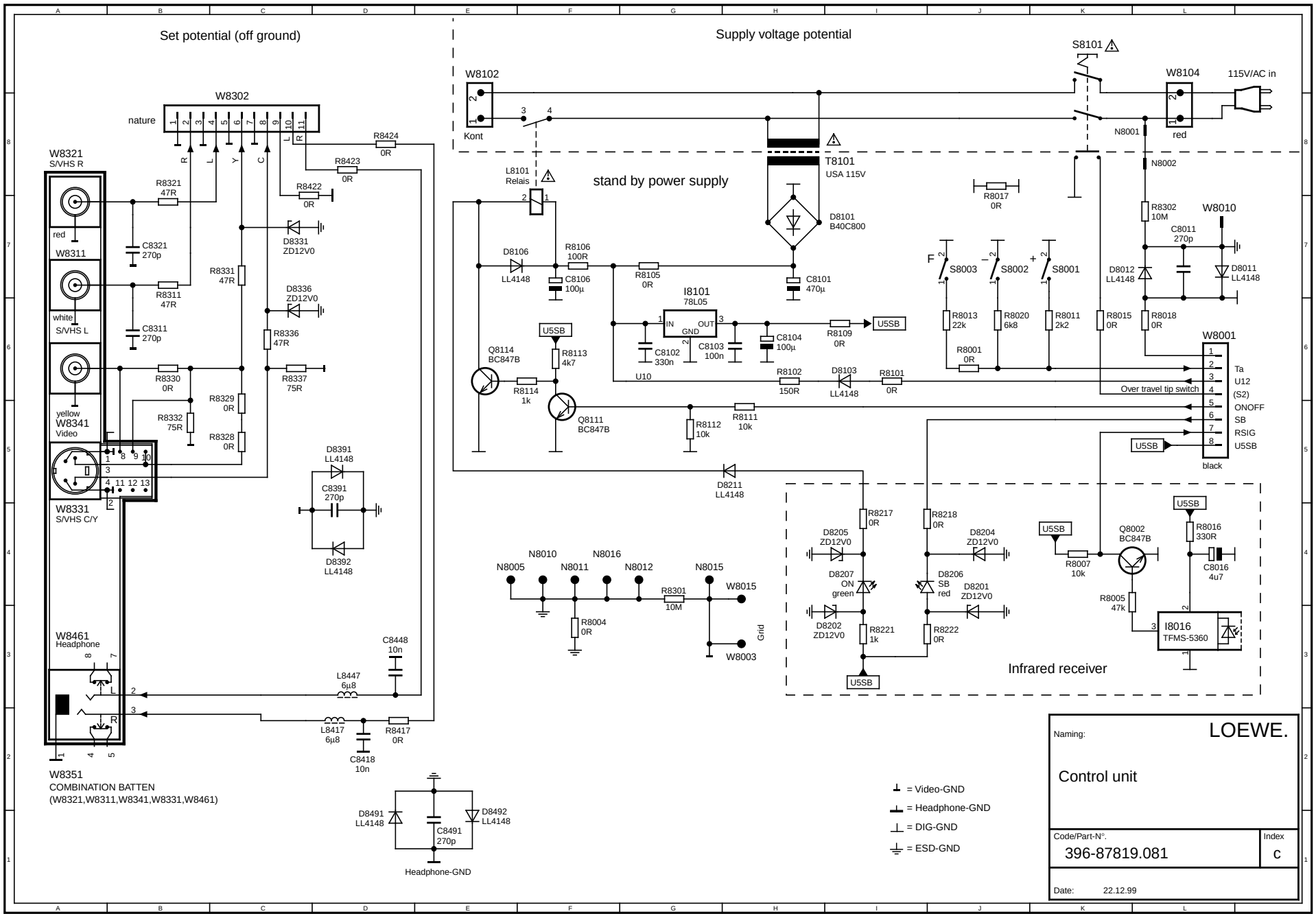


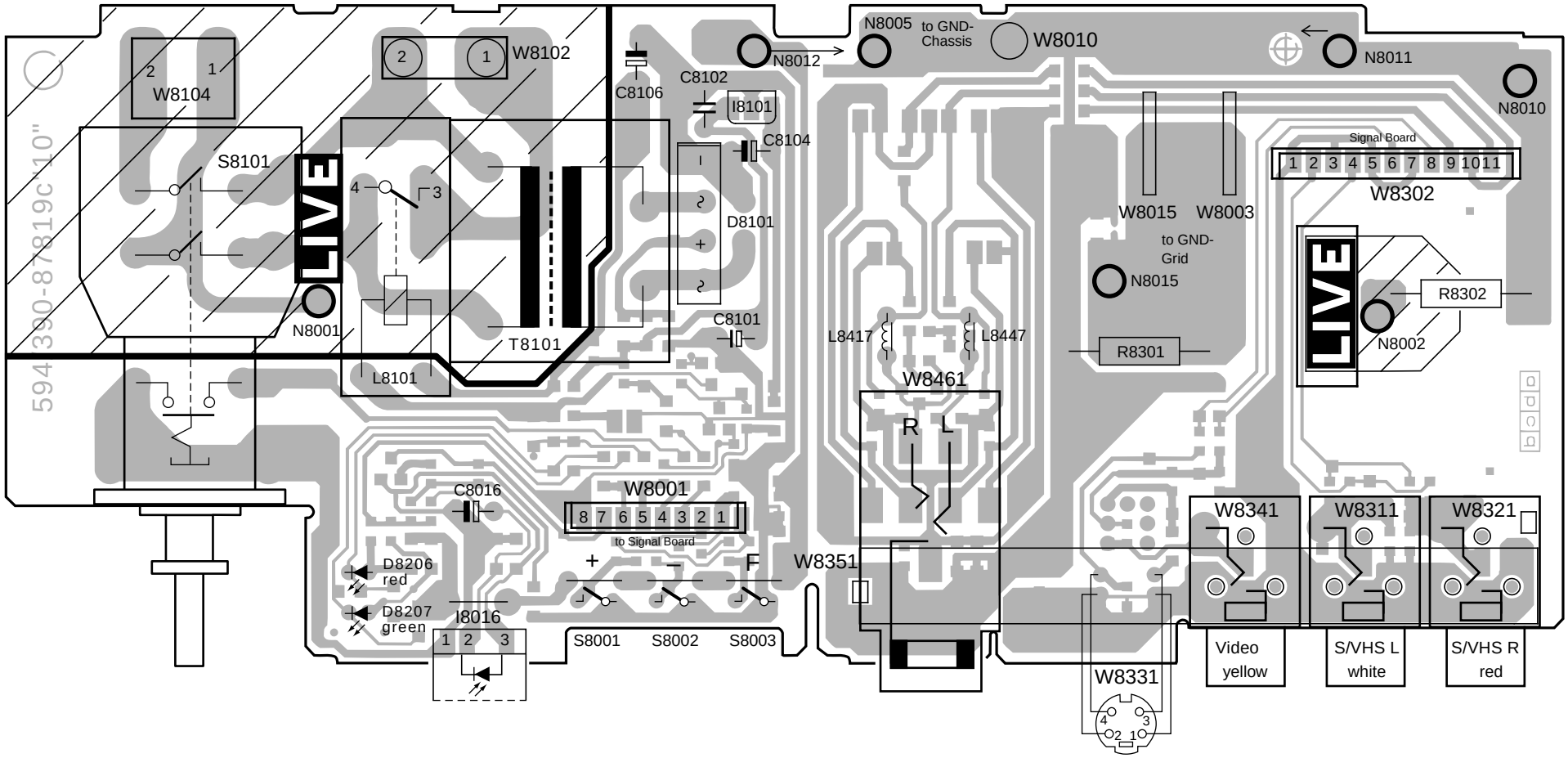
Control Board 396-87777.081

Components side



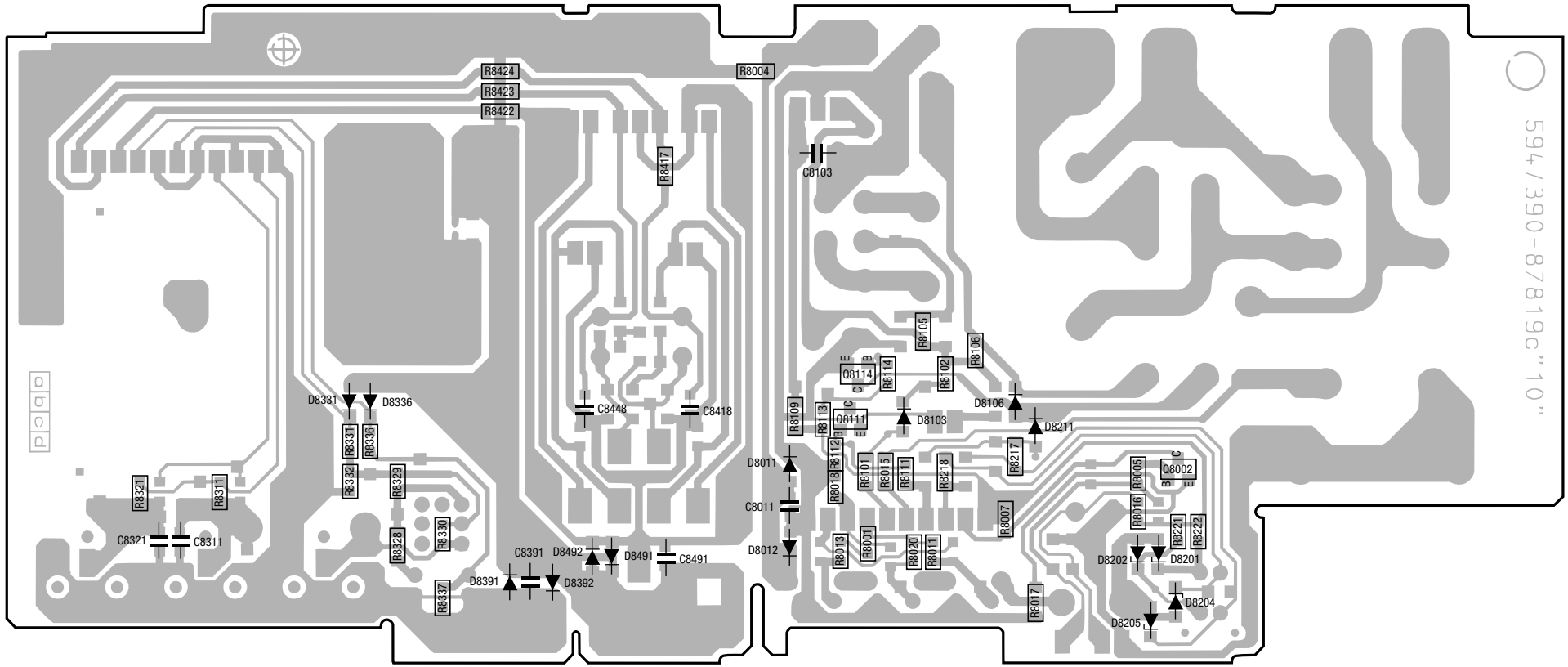
Control Board 396-87777.081
Solder side


Set potential (off ground)
Supply voltage potential
W8302
nature
W8321
S/VHS R
W8311
S/VHS L
W8341
Video
W8331
S/VHS C/Y
W8461
Headphone
W8351
COMBINATION BATTEN
(W8321,W8311,W8341,W8331,W8461)
W8102
Kont
S8101
W8104
115V/AC in
N8001
red
N8002
T8101
USA 115V
D8101
B40C800
L8101
Relais
stand by power supply
I8101
78L05
IN
OUT
GND
U5SB
U10
Q8114
BC847B
Q8111
BC847B
D8106
LL4148
D8211
LL4148
S8003
S8002
S8001
W8001
Ta
U12
(S2)
ONOFF
SB
RSIG
U5SB
black
Over travel tip switch
W8010
D8012
LL4148
D8011
LL4148
N8010
N8016
N8005
N8011
N8012
N8015
W8015
W8003
Grid
Infrared receiver
D8205
ZD12V0
D8207
ON
green
D8202
ZD12V0
D8204
ZD12V0
D8206
SB
red
D8201
ZD12V0
Q8002
BC847B
I8016
TFMS-5360
D8391
LL4148
D8392
LL4148
D8491
LL4148
D8492
LL4148
Headphone-GND
= Video-GND
= Headphone-GND
= DIG-GND
= ESD-GND
LOEWE.
Naming:
Control unit
Code/Part-N°.
396-87819.081
Index
c
Date:
22.12.99



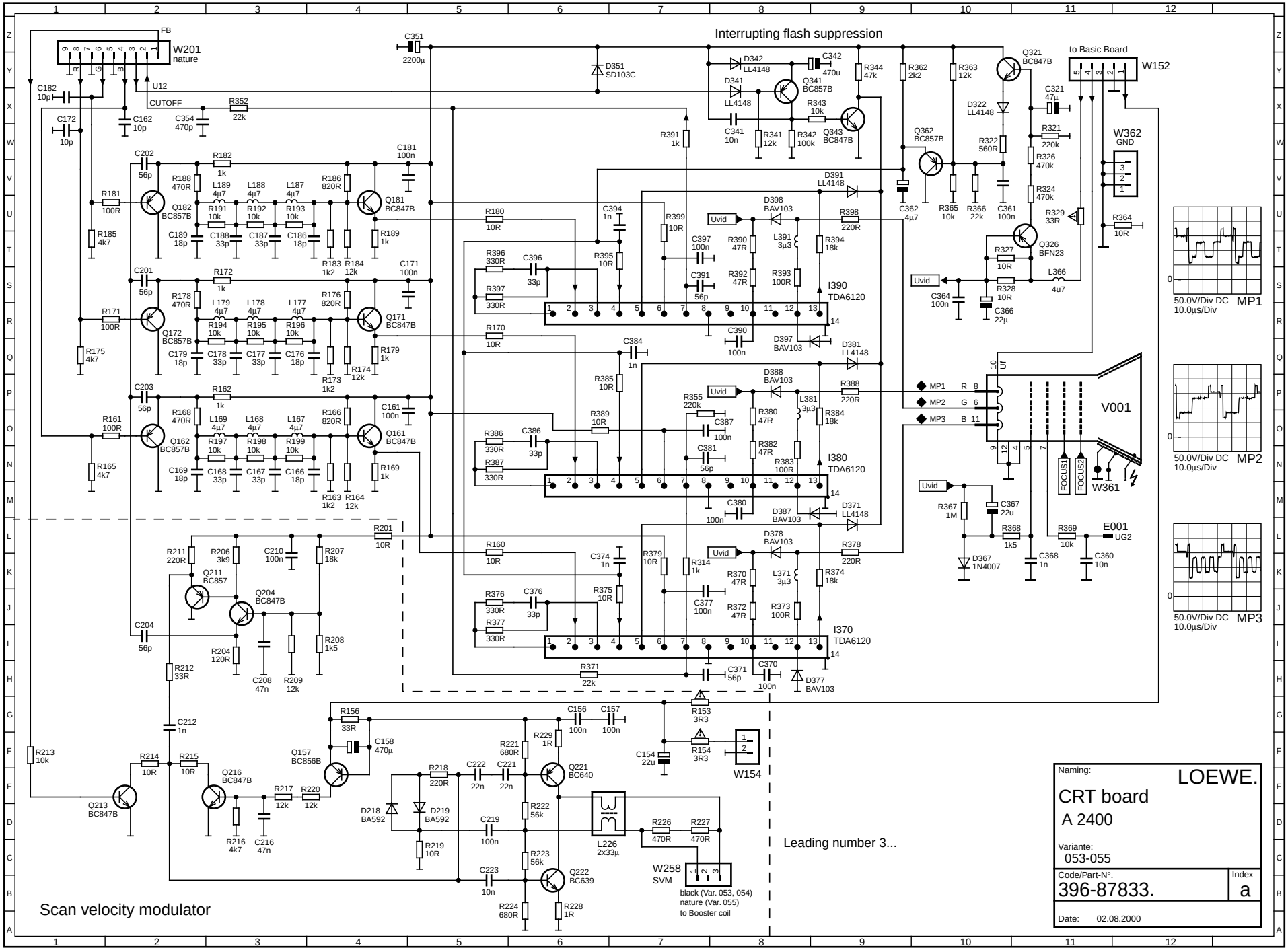
Control Board **396-87819.081**

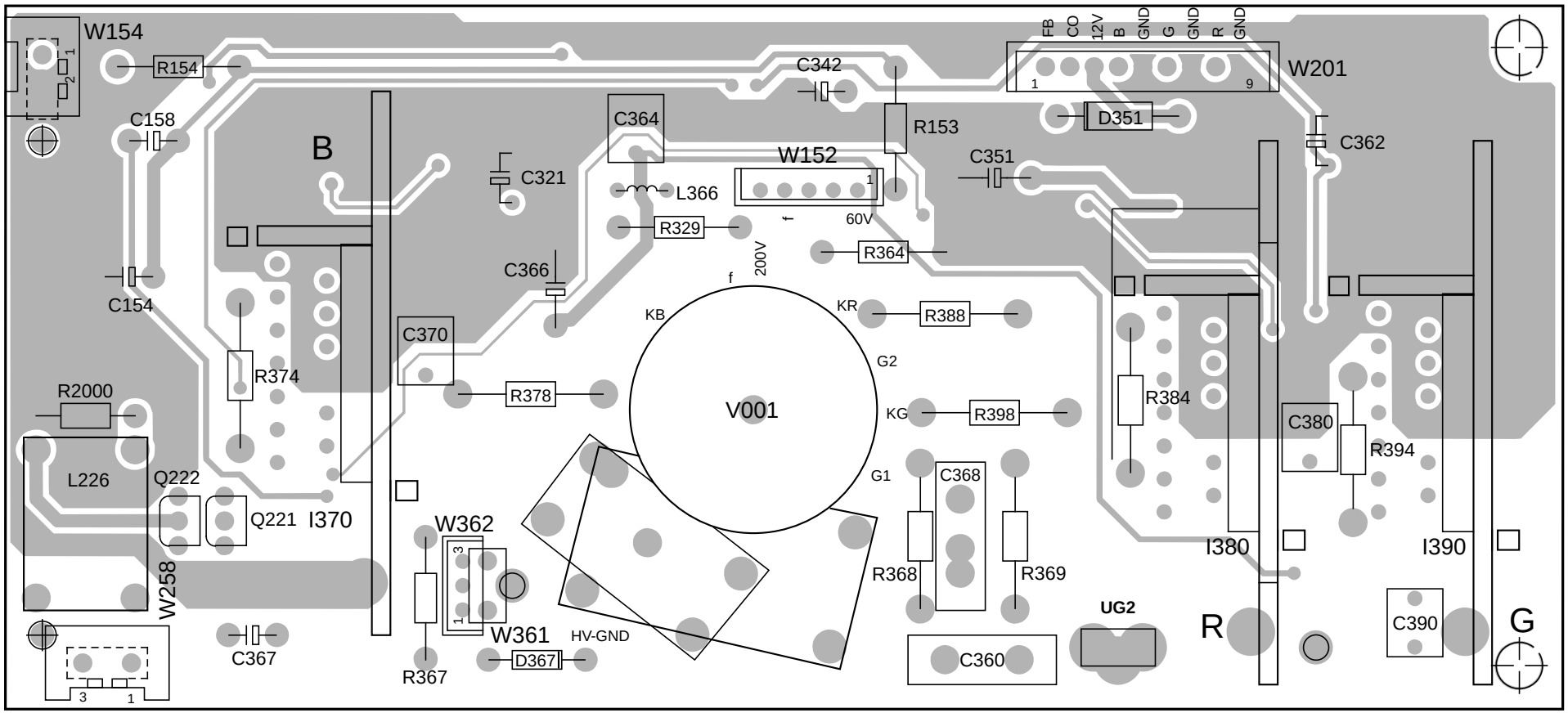
Components side



Control Board **396-87819.081**

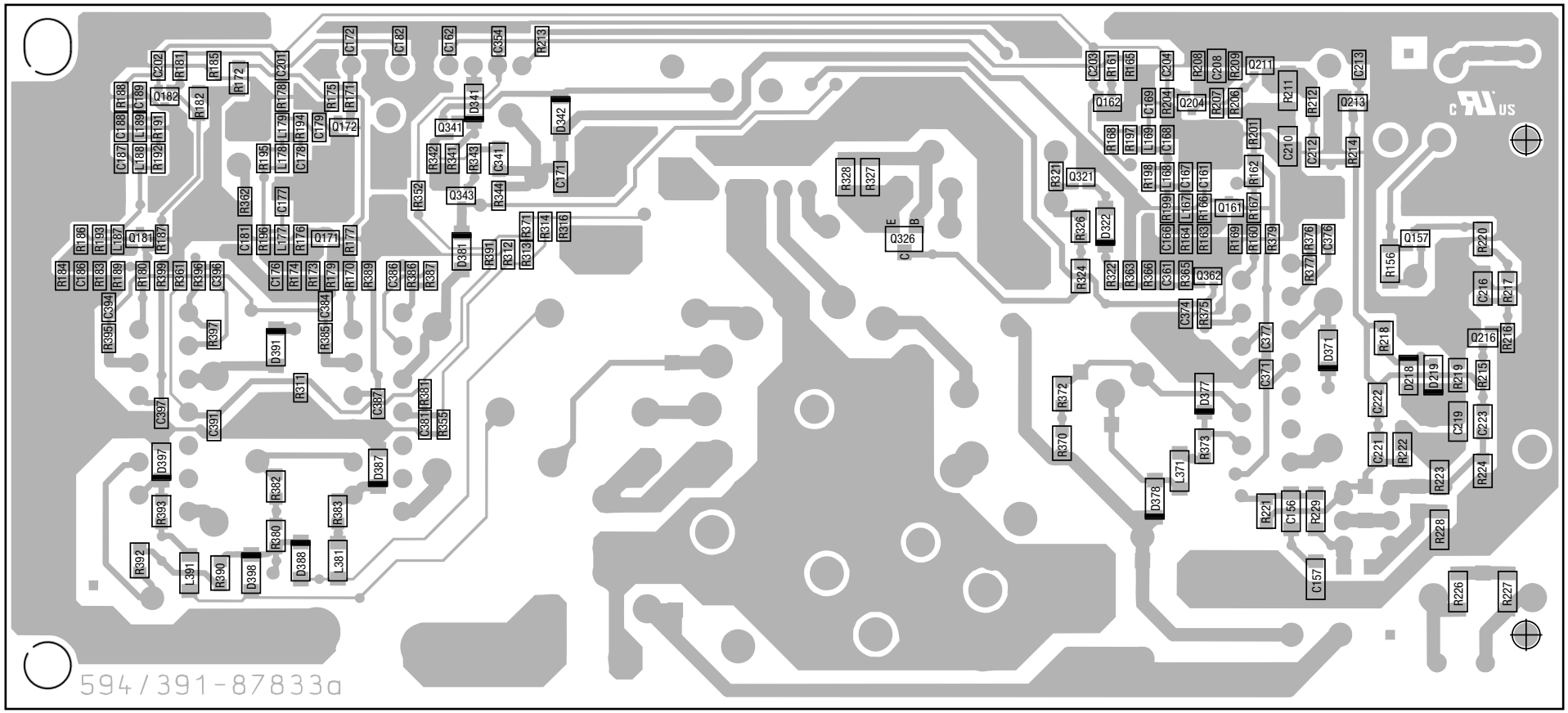
Lötseite • Solder side


Interrupting flash suppression
W201
nature
FB
U12
CUTOFF
C182 10p
C172 10p
C162 10p
C354 470p
R352 22k
C351 2200µ
D351 SD103C
D342 LL4148
C342 470u
D341 LL4148
Q341 BC857B
R343 10k
C341 10n
R341 12k
R342 100k
Q343 BC847B
R344 47k
R362 2k2
R363 12k
Q321 BC847B
to Basic Board
W152
D322 LL4148
C321 47µ
R321 220k
R322 560R
R326 470k
R324 470k
W362
GND
Q362 BC857B
R365 10k
R366 22k
C361 100n
C362 4µ7
R329 33R
Q326 BFN23
R327 10R
R328 10R
L366 4u7
C364 100n
C366 22µ
R364 10R
R391 1k
D391 LL4148
C202 56p
R182 1k
C181 100n
R181 100R
R188 470R
Q182 BC857B
L189 4µ7
L188 4µ7
L187 4µ7
R191 10k
R192 10k
R193 10k
R186 820R
Q181 BC847B
C189 18p
C188 33p
C187 33p
C186 18p
R183 1k2
R184 12k
R189 1k
R185 4k7
C201 56p
R172 1k
C171 100n
R171 100R
R178 470R
Q172 BC857B
L179 4µ7
L178 4µ7
L177 4µ7
R194 10k
R195 10k
R196 10k
R176 820R
Q171 BC847B
C179 18p
C178 33p
C177 33p
C176 18p
R173 1k2
R174 12k
R179 1k
R175 4k7
C203 56p
R162 1k
C161 100n
R161 100R
R168 470R
Q162 BC857B
L169 4µ7
L168 4µ7
L167 4µ7
R197 10k
R198 10k
R199 10k
R166 820R
Q161 BC847B
C169 18p
C168 33p
C167 33p
C166 18p
R163 1k2
R164 12k
R169 1k
R165 4k7
R180 10R
C394 1n
R399 10R
D398 BAV103
Uvid
R398 220R
C397 100n
R390 47R
L391 3µ3
R394 18k
R396 330R
C396 33p
R395 10R
C391 56p
R392 47R
R393 100R
R397 330R
I390
TDA6120
C390 100n
D397 BAV103
D381 LL4148
R170 10R
C384 1n
R385 10R
D388 BAV103
R388 220R
R355 220k
C387 100n
L381 3µ3
R380 47R
R384 18k
R389 10R
C381 56p
R382 47R
R386 330R
C386 33p
R387 330R
R383 100R
I380
TDA6120
C380 100n
D387 BAV103
D371 LL4148
R201 10R
R160 10R
C374 1n
R379 10R
D378 BAV103
R378 220R
R314 1k
R370 47R
L371 3µ3
R374 18k
R375 10R
C377 100n
R372 47R
R376 330R
C376 33p
R377 330R
R373 100R
I370
TDA6120
R371 22k
C371 56p
C370 100n
D377 BAV103
R153 3R3
R154 3R3
C154 22µ
W154
R156 33R
C156 100n
C157 100n
C158 470µ
R221 680R
R229 1R
Q221 BC640
R218 220R
C222 22n
C221 22n
D218 BA592
D219 BA592
R222 56k
C219 100n
L226 2x33µ
R226 470R
R227 470R
R219 10R
R223 56k
Q222 BC639
C223 10n
R224 680R
R228 1R
W258
SVM
black (Var. 053, 054)
nature (Var. 055)
to Booster coil
R213 10k
R214 10R
R215 10R
Q213 BC847B
Q216 BC847B
R217 12k
R220 12k
R216 4k7
C216 47n
Q157 BC856B
R211 220R
R206 3k9
C210 100n
R207 18k
Q211 BC857
Q204 BC847B
C204 56p
R204 120R
R208 1k5
C208 47n
R209 12k
R212 33R
C212 1n
Leading number 3...
Scan velocity modulator
MP1 R 8
MP2 G 6
MP3 B 11
V001
UF
FOCUS1
FOCUS2
W361
R367 1M
C367 22u
R368 1k5
R369 10k
E001
UG2
D367 1N4007
C368 1n
C360 10n
50.0V/Div DC
10.0µs/Div
MP1
MP2
MP3
Naming:
LOEWE.
CRT board
A 2400
Variante:
053-055
Code/Part-N°.
396-87833.
Index
a
Date: 02.08.2000



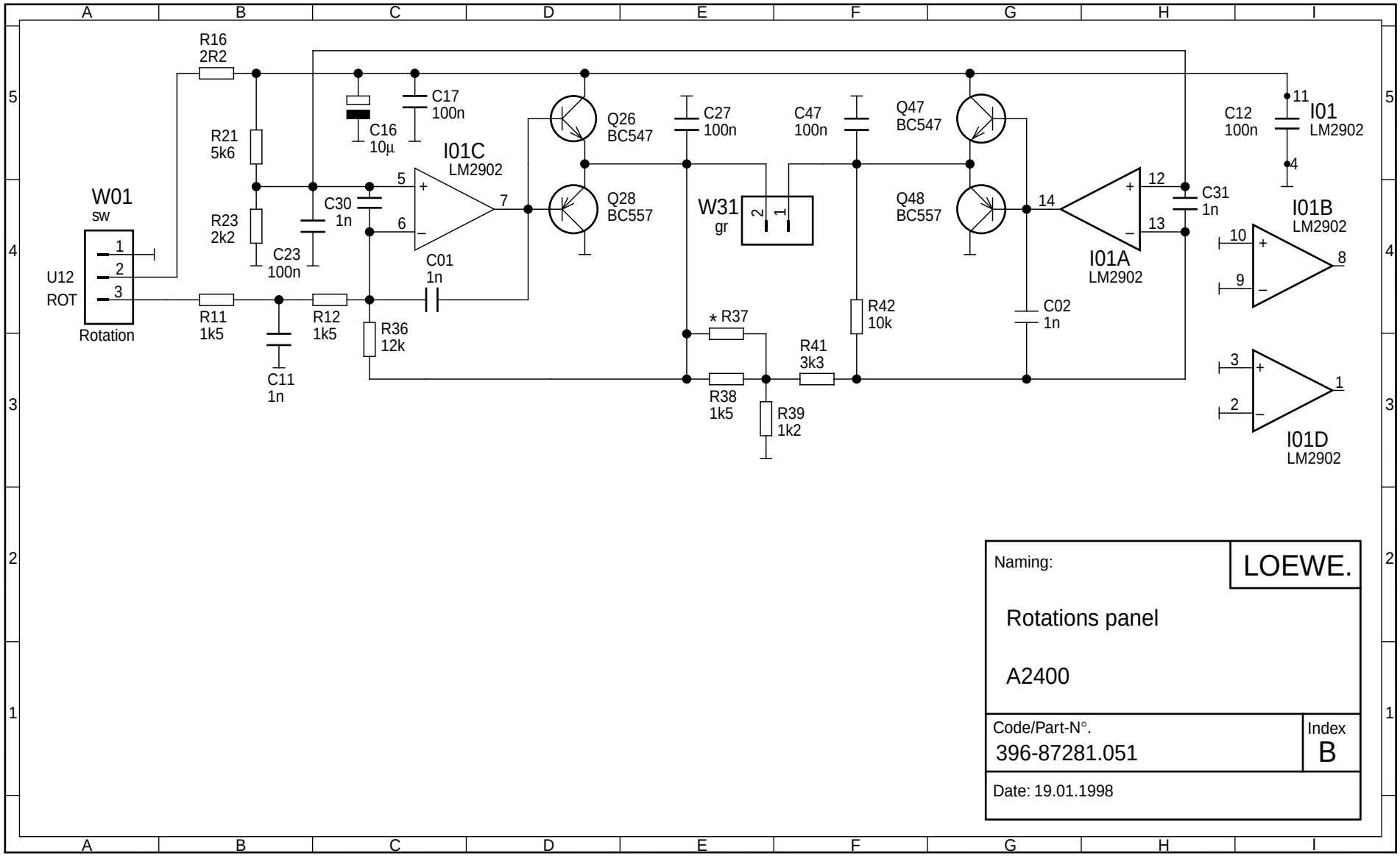
Picture tube PCB **396-87833A**

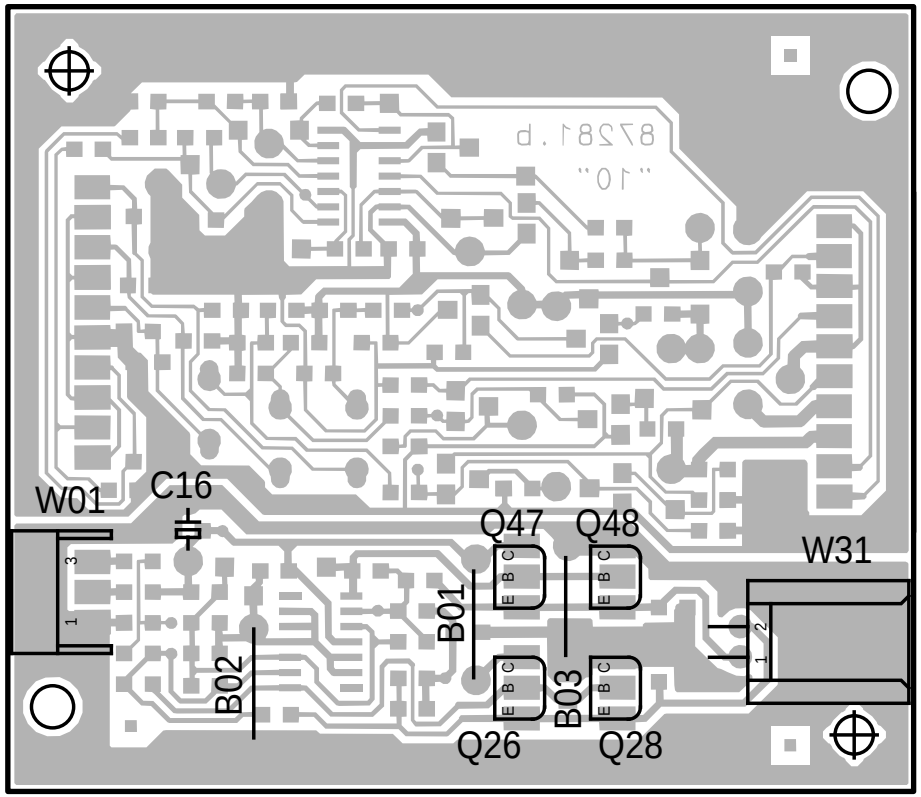
Components side



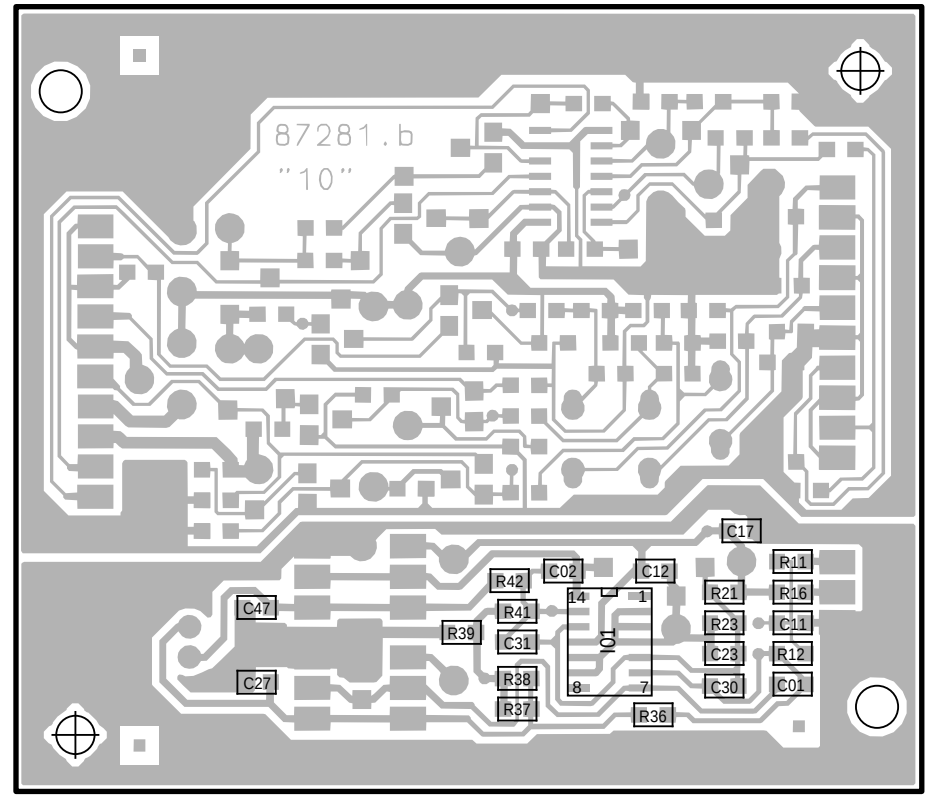
Picture tube PCB **396-87833A**

Solder side

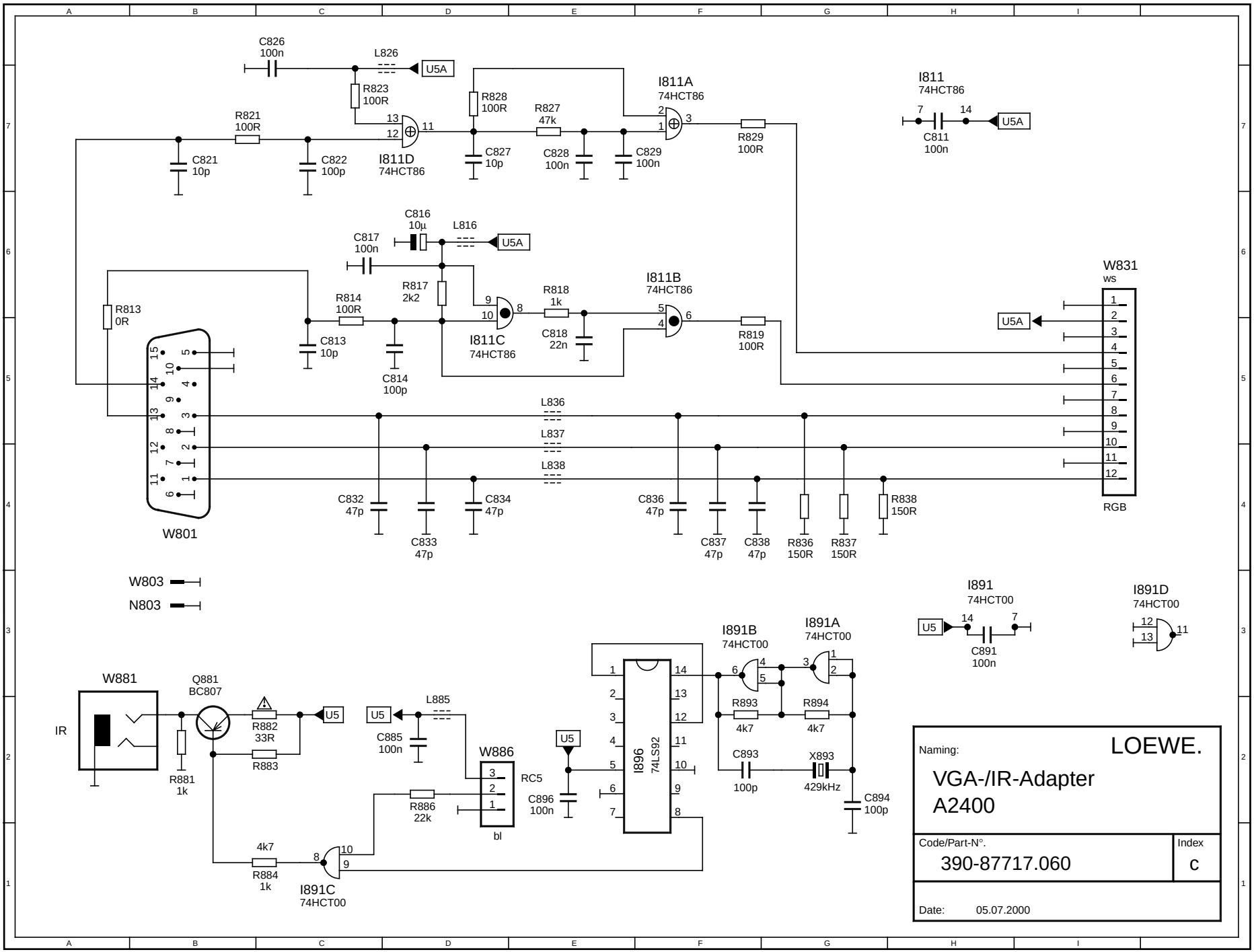

R16
2R2
R21
5k6
R23
2k2
C16
10µ
C17
100n
I01C
LM2902
C30
1n
C23
100n
C01
1n
W01
sw
U12
ROT
Rotation
R11
1k5
R12
1k5
C11
1n
R36
12k
Q26
BC547
Q28
BC557
C27
100n
W31
gr
* R37
R38
1k5
R39
1k2
C47
100n
R41
3k3
R42
10k
Q47
BC547
Q48
BC557
C02
1n
I01A
LM2902
C31
1n
C12
100n
I01
LM2902
I01B
LM2902
I01D
LM2902
Naming:
LOEWE.
Rotations panel
A2400
Code/Part-N°.
396-87281.051
Index
B
Date: 19.01.1998



Rotation Panel PCB 396-87281.051
Components side



Rotation Panel PCB 396-87281.051
Solder side



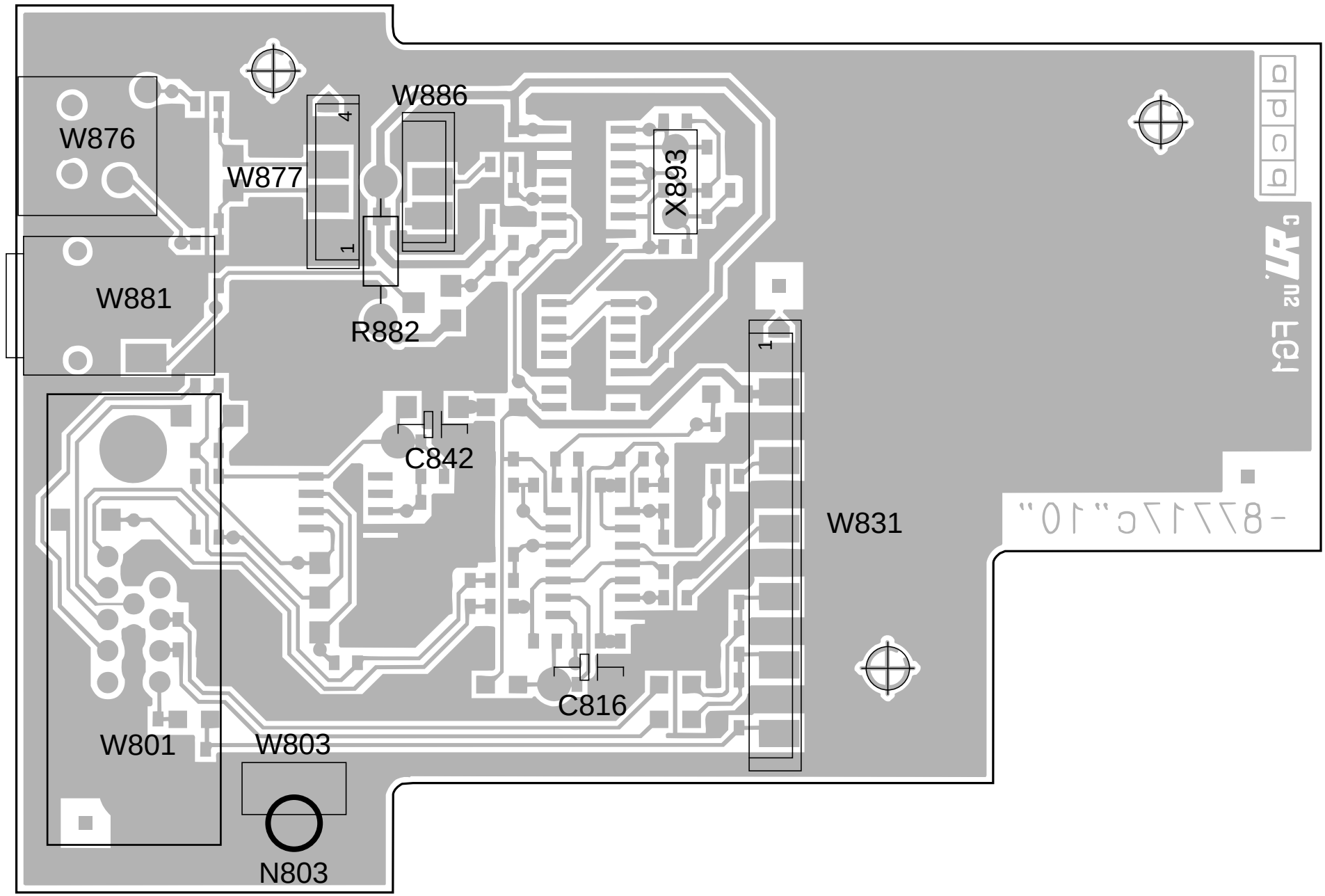
Naming: LOEWE.

VGA-/IR-Adapter
A2400

Code/Part-N°. 390-87717.060

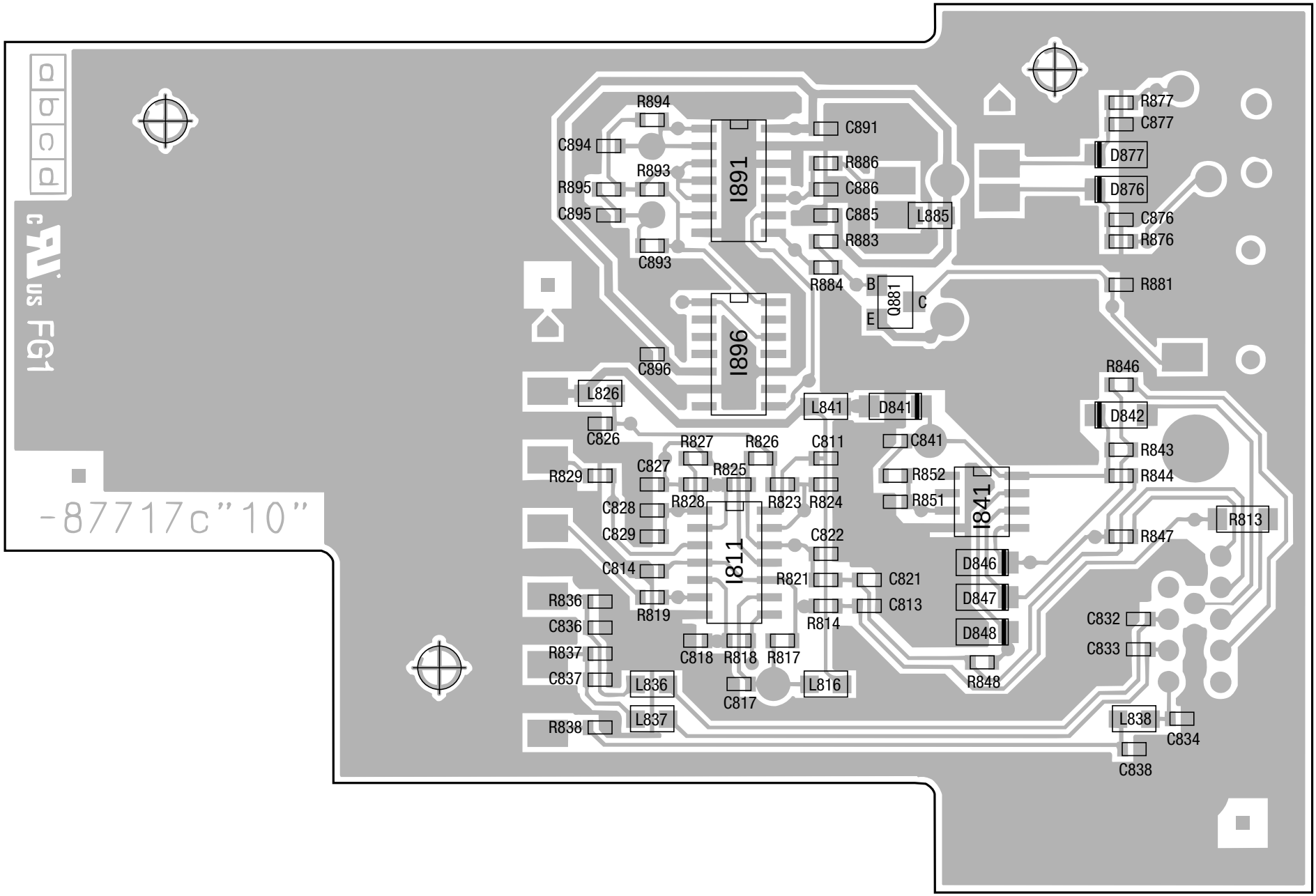
Index c

Date: 05.07.2000



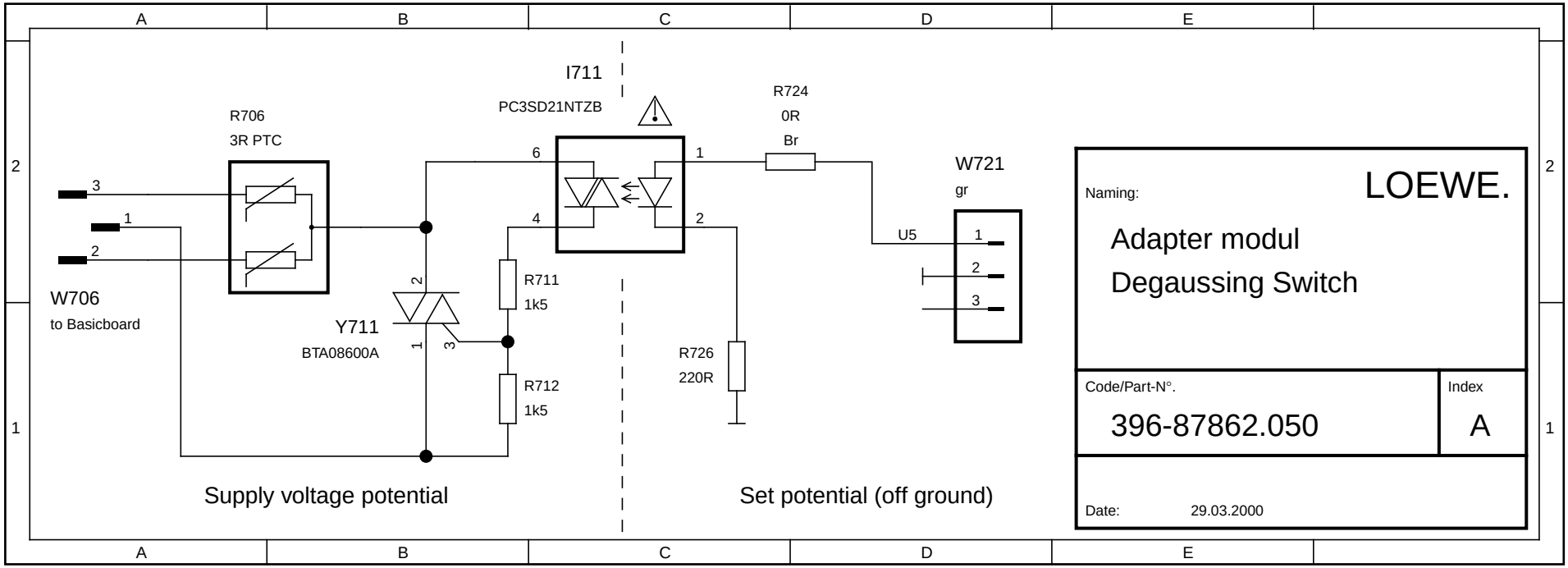
VGA-/IR-Adapter **396-87717C**

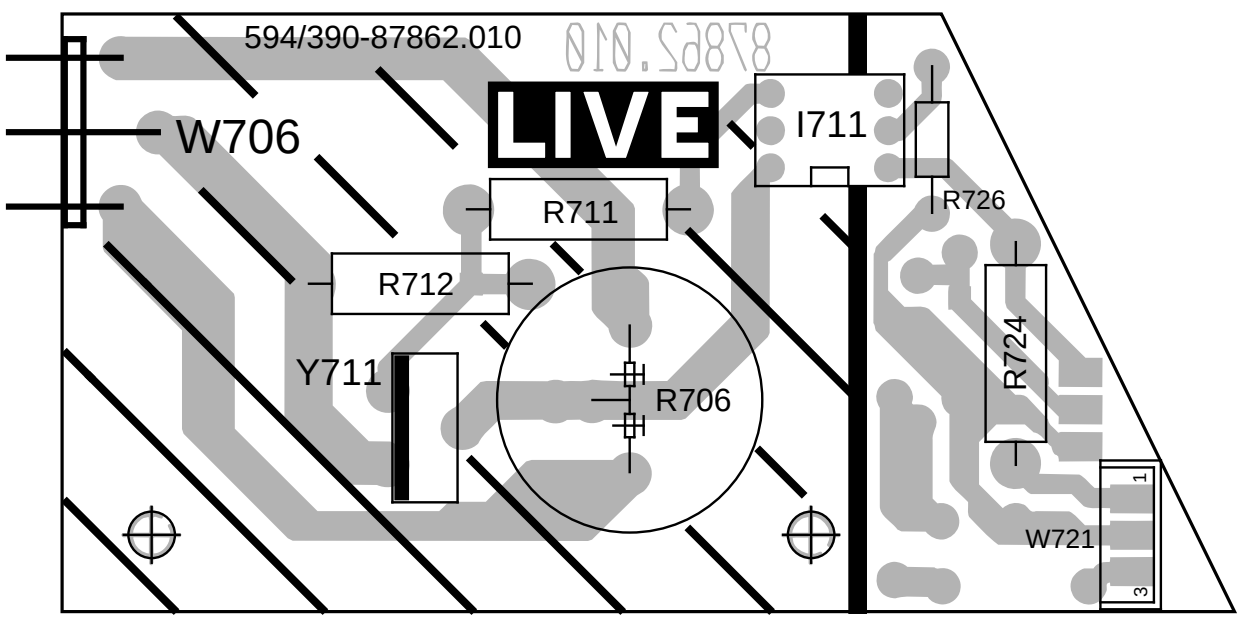
Components side



VGA-/IR-Adapter **396-87717C**

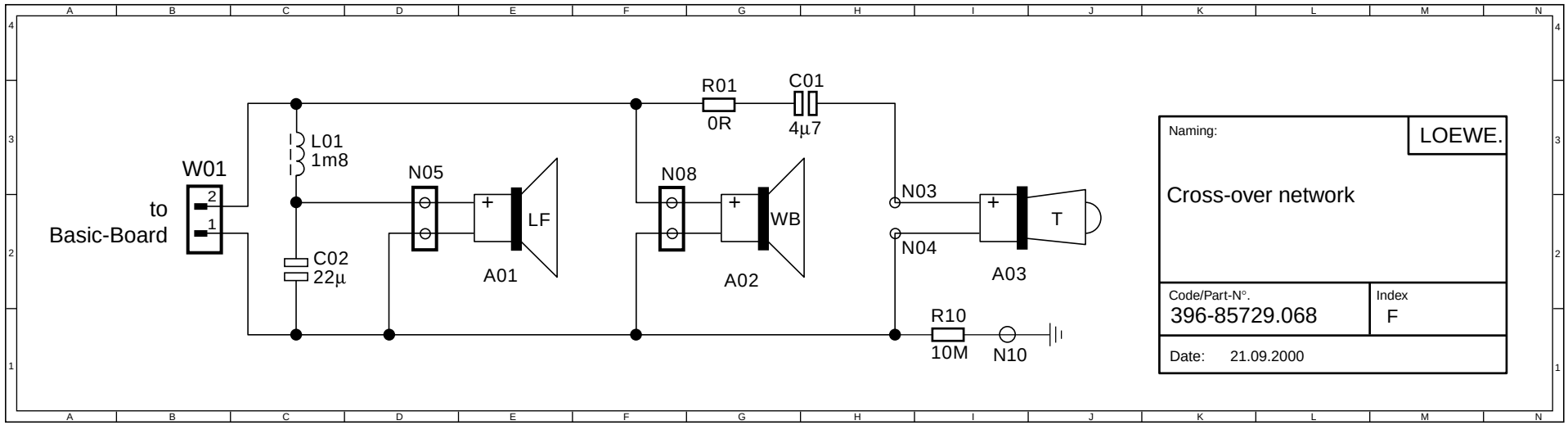
Solder side

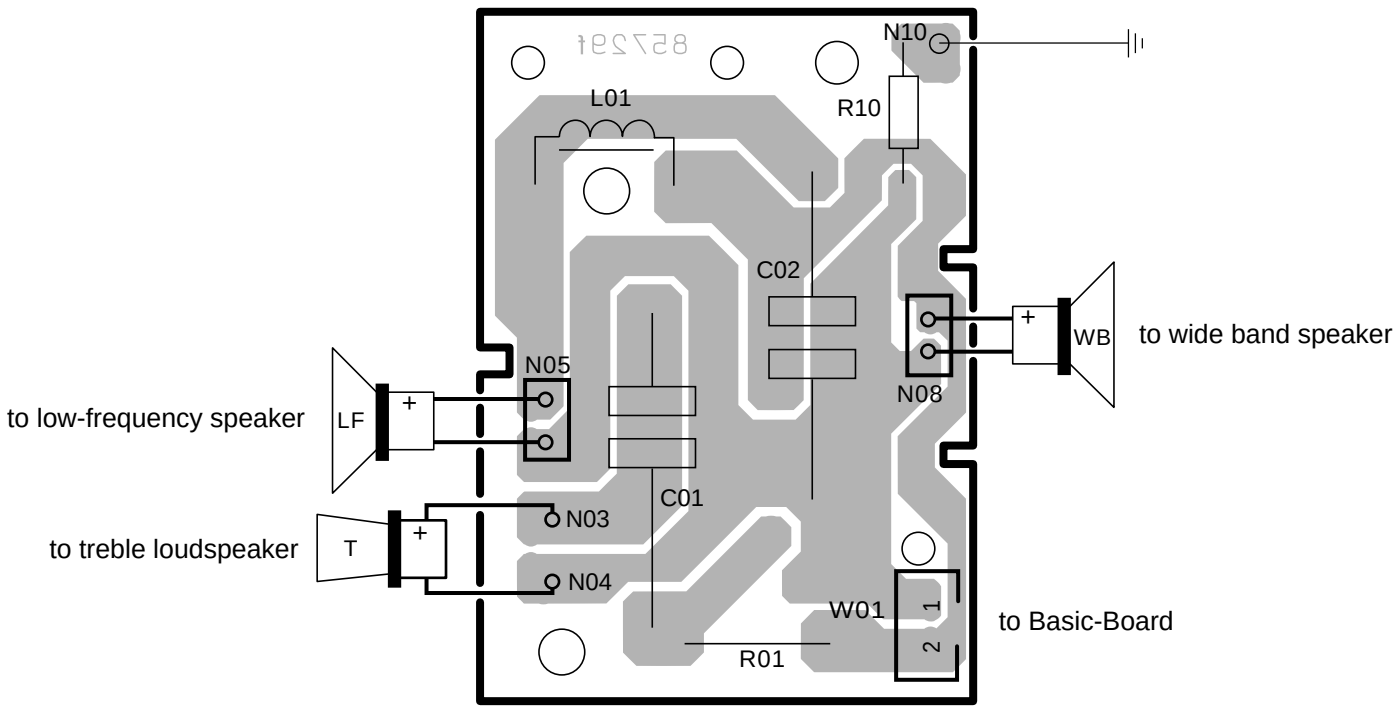




Degaussing switch **396-87862A**

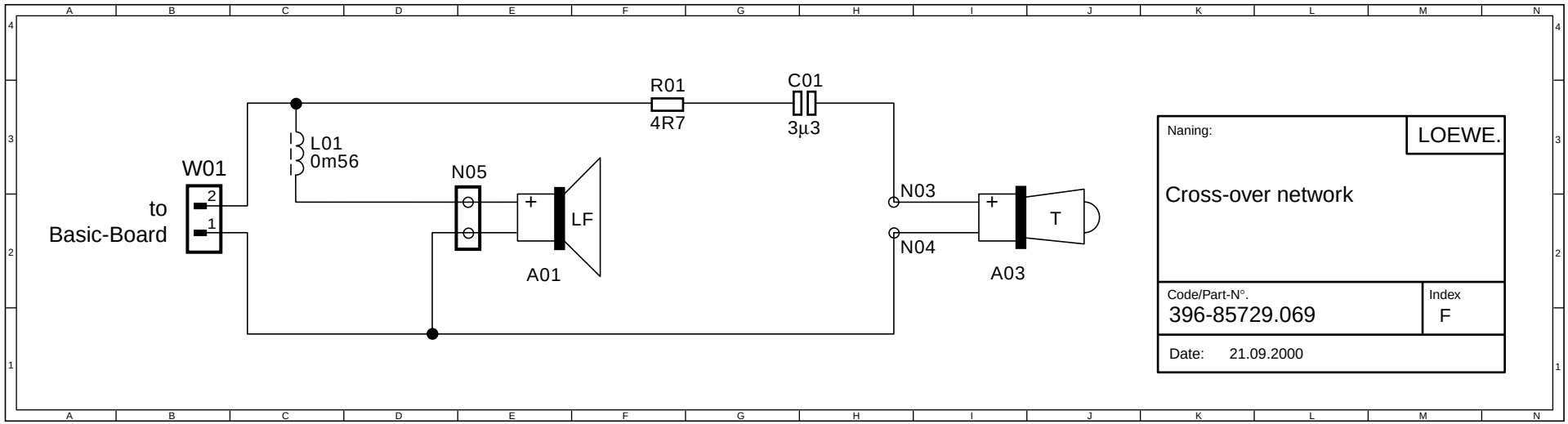
Components side

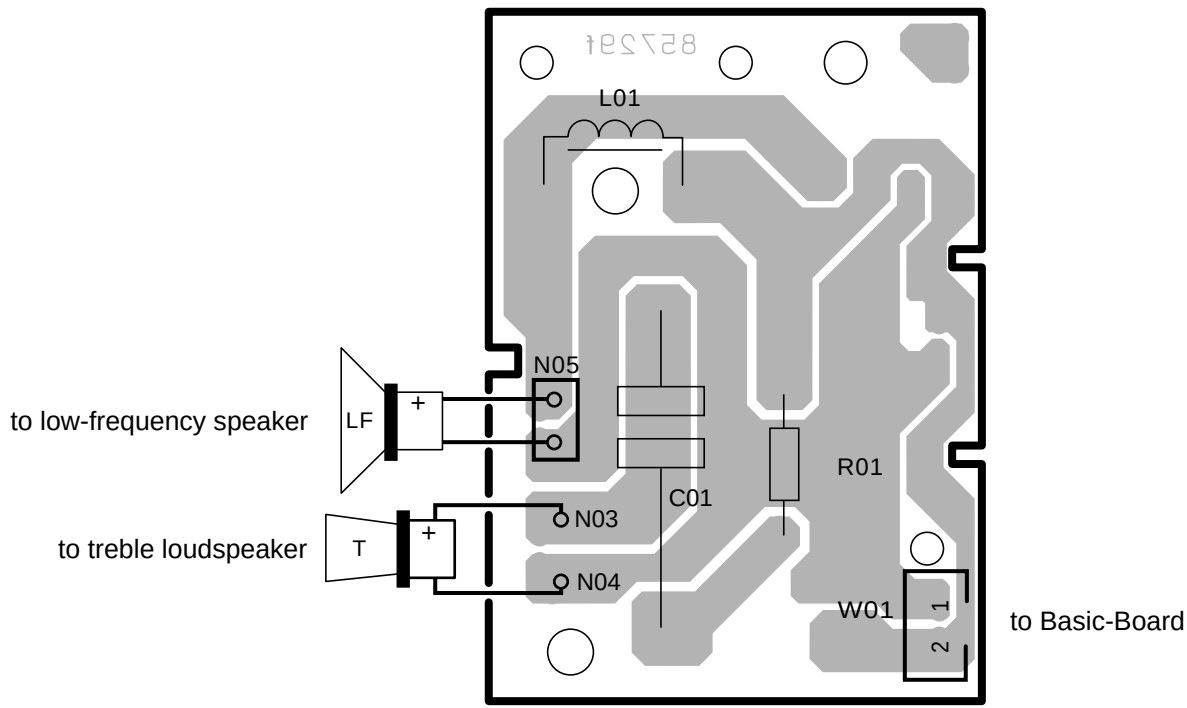




Cross-over network PCB **396-85723.068**

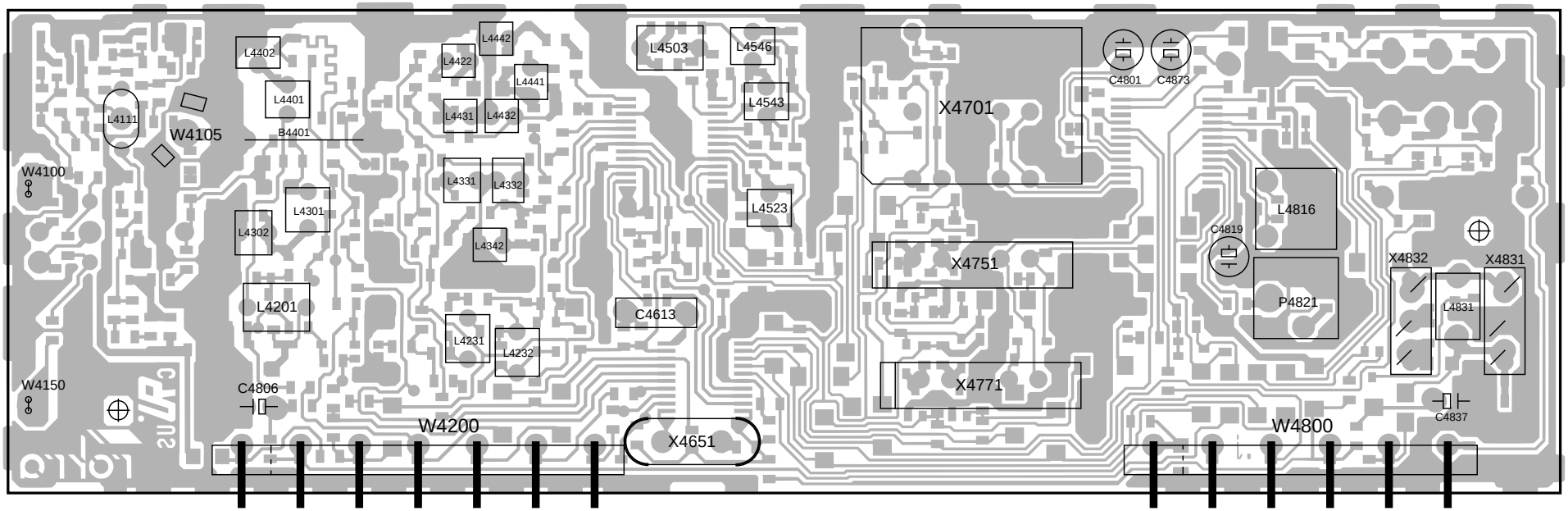
Component side



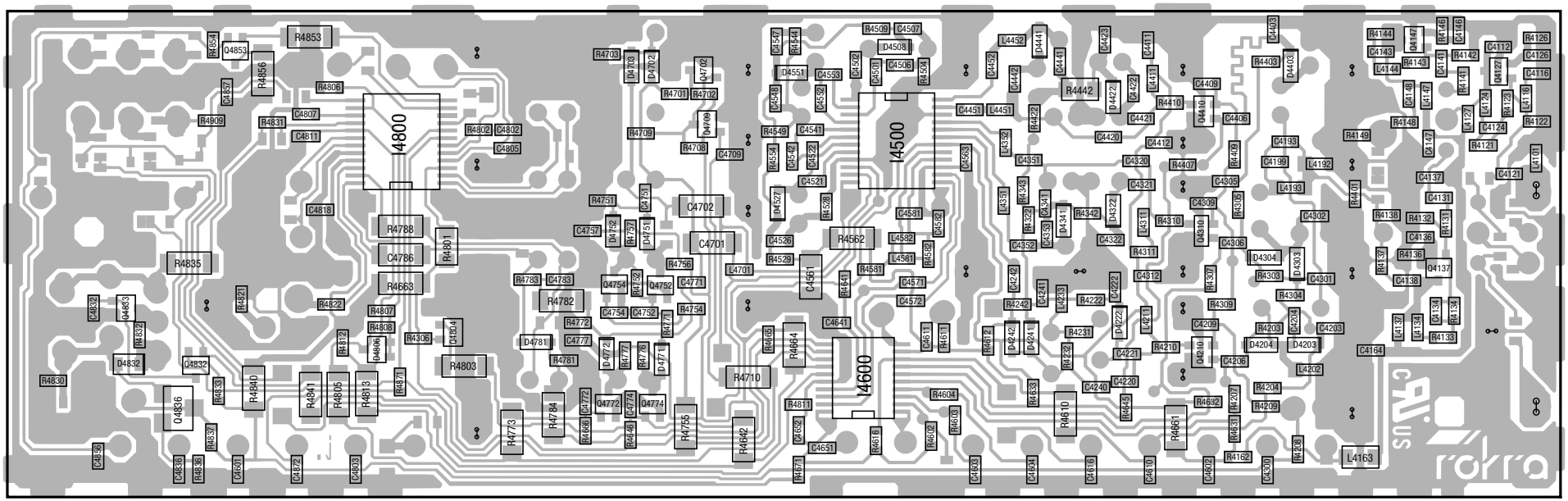


Cross-over network PCB **396-85723.069**

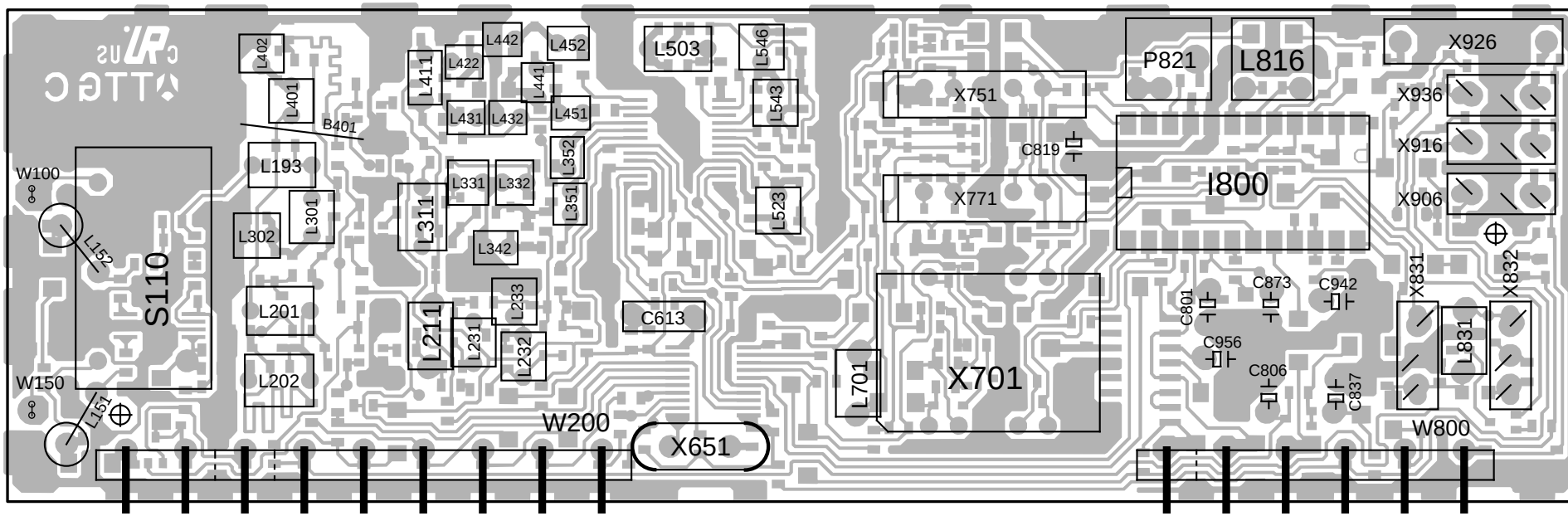
Component side



Tuner/IF PCB **396-87222i**
Components side

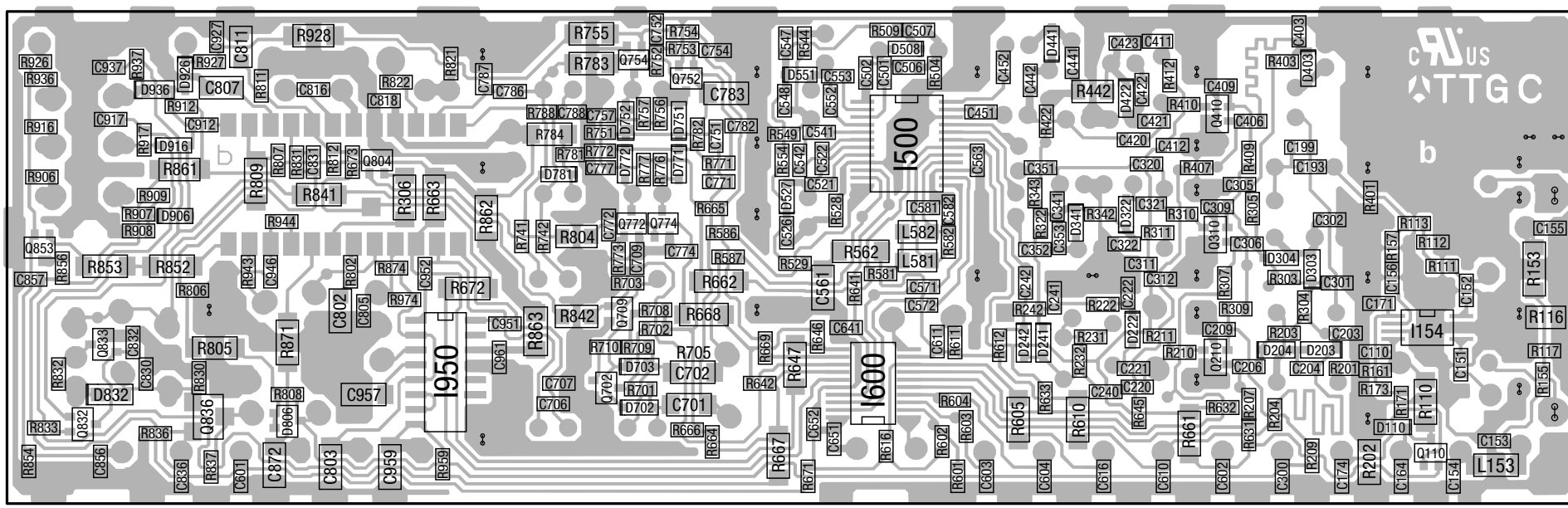


Tuner/IF PCB **396-87222i**
Solder side



Tuner/IF PCB **396-87526B**
Components side

Leading Number 4 . . .


I500
I600
I950
I154
L582
L581
R562
R662
R668
R705
C702
C701
R667
R647
R605
R610
R661
R202
L153
R153
R116
R928
R755
R783
C783
C807
C811
C816
C818
R809
R841
R861
R306
R663
R862
R804
R842
R863
R672
R852
R853
R805
R871
C802
C805
C957
C872
C803
C959
R959
I950
D832
Q836
C836
C601
R837
R854
C856
R833
Q832
R832
C830
Q833
C832
R830
R808
D806
R836
C961
C951
C707
C706
C702
R701
D702
D703
R710
R709
R708
R702
C709
R703
C774
R587
R586
R665
R772
R773
C772
Q772
Q774
R741
R742
R784
R788
C788
R781
D781
R777
R776
D771
R771
C771
R782
C782
R751
D751
R757
R756
D752
R752
C752
R753
R754
C754
Q754
Q752
R549
C541
R554
C542
C522
C521
R528
R526
D527
C526
R529
R581
R641
C641
R646
R669
R647
R642
R666
R664
C652
C651
R671
R667
R616
R602
R601
R604
R603
C603
C604
C616
C610
C602
C300
R209
C174
R202
C164
C154
L153
Q110
C153
R110
R171
R178
R161
C110
C201
R201
C204
D204
D203
C203
C206
Q210
R232
R231
R211
D211
D241
D242
C241
C242
R242
R222
C222
C221
C220
C240
R645
R633
R632
R631
R207
R204
D110
R158
C151
C152
R117
C155
R112
R113
C302
C301
R303
D303
D304
R304
C306
Q310
R307
C309
R310
C312
C311
C322
R311
C320
C321
D322
R322
R343
C341
D341
R342
C352
C351
C305
R305
R309
C209
C199
C193
R407
R409
C409
Q410
R410
C406
C412
C421
C420
C422
D422
C423
C411
R412
R403
D403
C403
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C613
C701
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C731
C732
C733
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C735
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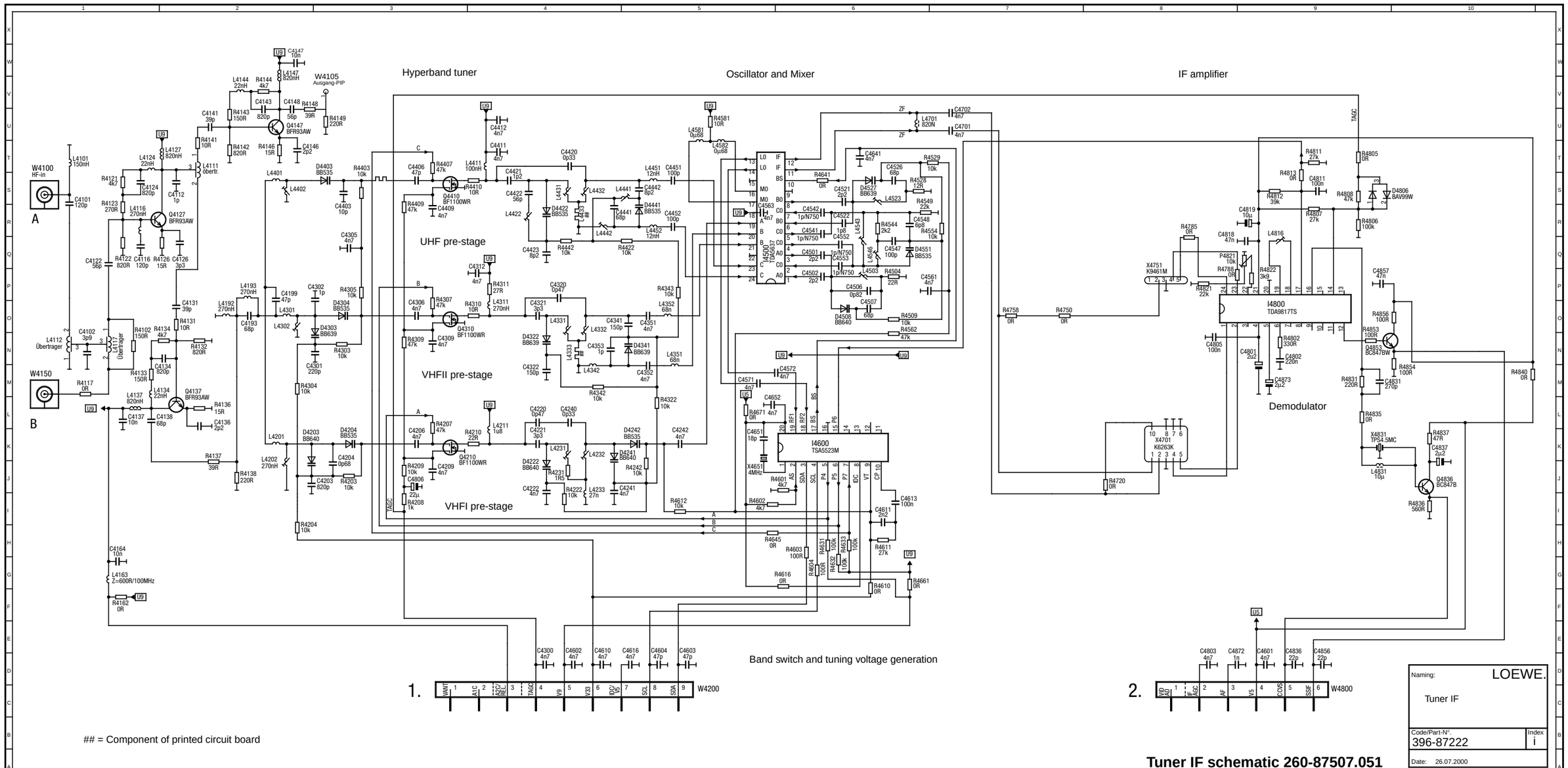
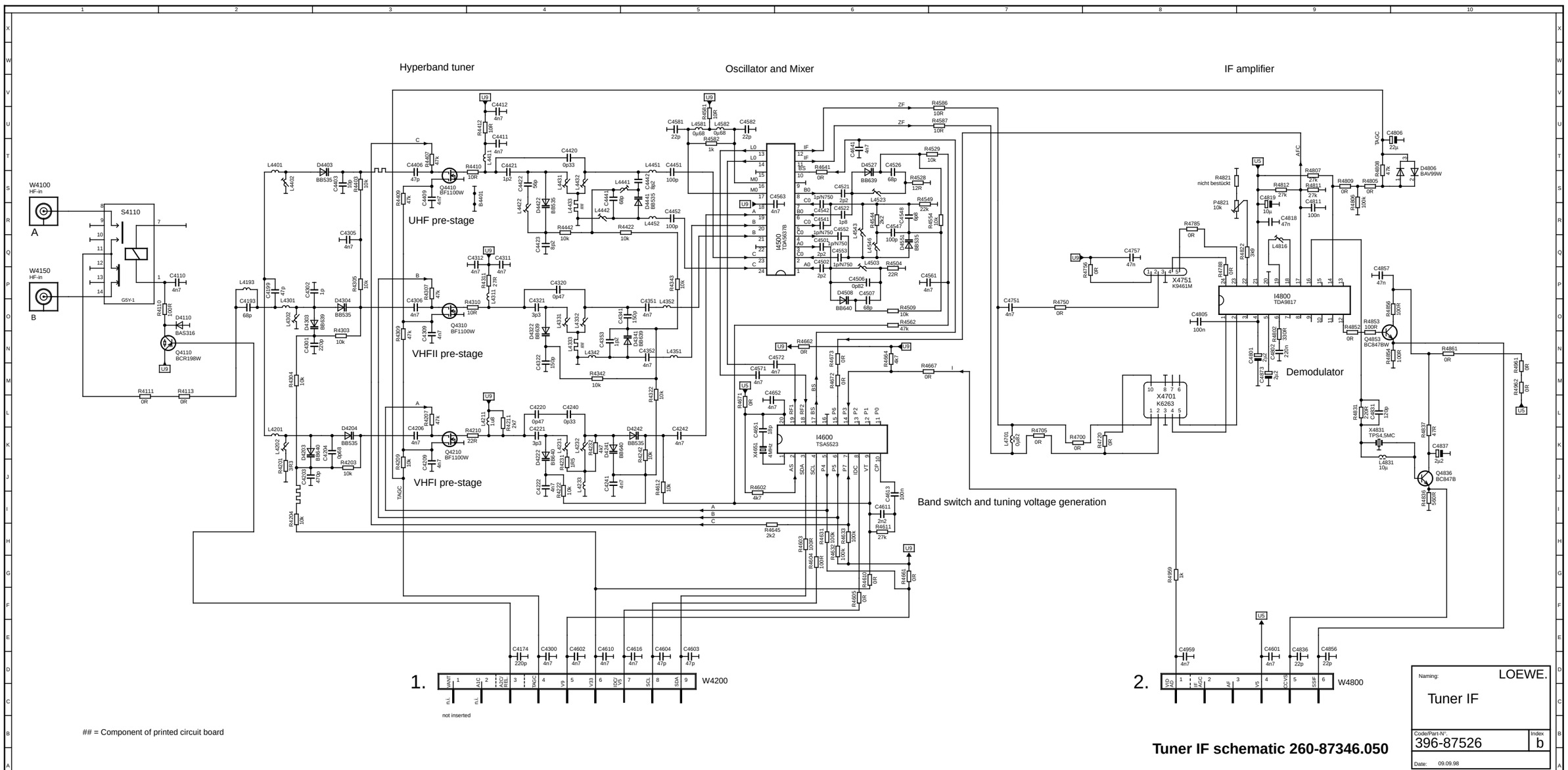
C748
C749


Hyperband tuner
Oscillator and Mixer
IF amplifier
UHF pre-stage
VHFII pre-stage
VHFI pre-stage
Band switch and tuning voltage generation
Demodulator
W4100 HF-in
W4150
W4105 Ausgang-PIP
W4200
W4800
I4600 TSA5523M
I4800 TDA9817TS
L4500 TDA6617
X4701 K6263K
X4751 KS461M
X4831 TPS4.5MC
X4651 4MHz
Tuner IF
Naming: LOEWE.
Code/Part-N°: 396-87222
Index i
Date: 26.07.2000
= Component of printed circuit board
Tuner IF schematic 260-87507.051


Hyperband tuner
Oscillator and Mixer
IF amplifier
UHF pre-stage
VHFII pre-stage
VHFI pre-stage
Band switch and tuning voltage generation
Demodulator
W4100
HF-in
A
W4150
HF-in
B
S4110
GSY-1
I4500
TDA5637B
I4600
TSA5523
I4800
TDA9817
X4751
K9461M
X4701
K6263
X4831
TPS4,5MC
Q4110
BCR198W
Q4310
BF1100W
Q4210
BF1100W
Q4836
BC847B
Q4853
BC847BW
D4110
BAS316
D4806
BAV99W
1.
W4200
not inserted
2.
W4800
= Component of printed circuit board
Tuner IF schematic 260-87346.050
LOEWE.
Naming:
Tuner IF
Code/Part-N°:
396-87526
Index
b
Date:
09.09.98

A 2400

TV set type	PLA 5303	ACO 9303 MB	CAL 2323 MB	Components	
Art.-N°.	59470.00	59471.00	59414.00		
Set components	●			Basic Board, 32" 16:9	396-87715.071
			●	Basic Board, 33"	396-87715.073
		●		Basic Board, 32"	396-87715.074
	●	●	●	Tuner IF, (87222)	260-87507.051
	●	●	●	Tuner IF, (87526)	260-87346.050
	●	●	●	Signal Board	396-87934.050
			●	Control Board	396-87506.081
	●			Control Board	396-87777.081
		●		Control Board	396-87819.081
			●	CRT Board	396-87833.053
	●			CRT Board	396-87833.054
		●		CRT Board	396-87833.055
	●	●		Rotations Panel	396-87281.051
	●	●	●	Degaussing switch	396-87862.050
	●	●	●	Adapter PCB	396-87957.050
	●	●	●	VGA-/IR-Adapter	396-87717.060
	●			CRT 32" A 76 ESF 031 X 44 16:9	345-26377
			●	CRT 33" A 80 EFF 002 X 43 4:3	345-26133
		●		CRT 32" W 76 ERF 041 X 044 (Real Flat) 16:9	345-28611
	●			Cross-over network	396-85729.068
		●	●	Cross-over network	396-85729.069
	●	●	●	Remote Handset ”Control-USA”	263-87000.063

CHASSIS REPLACEMENT PARTS LIST

Warning: Before servicing this chassis, read the “X-ray radiation precaution”, “Safety precaution” and “Product safety notice” instructions on page 3 of this manual.

CAUTION: The international hazard symbols “⚠” in the schematic diagram and the parts list designate components which have special characteristics important for safety including X-Ray and should be replaced only with types identical to those in the original circuit or specified in the parts list. The mounting position of replacements is to be identical with originals. Before replacing any of these components, read carefully the PRODUCT SAFETY NOTICE. Do not degrade the safety of the receiver through improper servicing.

CAL 2323 **Art.-Nr. 59414.00**

Pos.Nr. Item N°.	Bestell-Bezeichnung	Description	Bestell-Nr. List Part N°.	Var. Var.
	BAUGRUPPEN	**UNITS**		
830	LPL.Frequenzweiche kpl.	Print Circuit Board	396-85729063	
970	VGA EBS A2400	Scaffolding Access	291-87808002	
980	Adapter A2400 kpl.	Print Circuit Board	396-87957050	
U2400	BAS-B. kpl. A2400 TU-USP99,US/33" ..	Print Circuit Board	396-87715073	
U2401	SIG-B. kpl. A2400	Print Circuit Board	396-87934050	
U3371	Bildrohrpl./SVM kpl. A2400 4:3	Print Circuit Board	396-87833053	
U8211	LPL.Bedienung kpl. A2400	Print Circuit Board	396-87506081	
	DRUCKSACHEN	**OPERATING INSTRUCTIONS**		
500	BAN für USA-Geräte -GB-	Operating Instruction	233-27832002	
570	Garantie u. Antwortkarte USA	Guaranty Card	224-28352	
580	Bed.-Kurzanleitung USA	Operating Instruction	233-28345002	
	GERÄTEBEIPACK	**SET SUPPLEMENT**		
A0640	Mikrozelle 1,5V Alkali-Mangan	Battery	280-13411	
N331	Adapter Mini-DIN/Chinch USA	Connecting Cable	169-88021001	
N402	Subwoofer Adapter	Socket	323-86788	
U0002	Adapter Antenne IEC-F männlich	Socket	323-28138	
U9111	IR-Fernbedienung Control USA arktis .	Transmitter	263-87000063	
	VERPACKUNGSMATERIAL	**PACKING MATERIAL**		
102	Schutzstreifen (A)	Protecktive Packing	253-20816	
600	Verpackungskarton LO-Druck	Packing Case	245-86271702	
610	Packschalen-Satz 33" ARC/CAL	Cushion-Set	252-86273750	
J0701	Schutzstreifen 350 x 190 mm (IR-G.) ..	Protecktive Packing	253-84666004	
	VERBINDUNGSLEITUNG	**CONNECTING CABLES**		
N8102	Netzkabel USA m. Drossel 3200lg	Power Cord	170-87684002	
	KNÖPFE	**BUTTONS**		
303	Knopf II/Netzschalter USA/Tandberg	Button	682-85749012	
320	Knopf/Taster schwarz	Button	682-85081111	

CAL 2323 **Art.-Nr. 59414.00**

Pos.Nr. Item N°.	Bestell-Bezeichnung	Description	Bestell-Nr. List Part N°.	Var. Var.
	GEHÄUSETEILE	**CABINET MOUNTING**		
111	Halter/RW	Holder	602-85723101	
112	Schraube M4,0x10-4.8 f.RW-Befest.	Screw	435-24094	
	GEHÄUSETEILE	**CABINET MOUNTING**		
113	EJOT-PT-Schraube 4,0x14 KB40x14 .	Screw	440-27773	
200	Distanzstück	Clutch Piece	503-24754	
230	Halter/Entmag.	Holder	602-84286101	
301	Träger/Bed. Bedr.	Supporter	541-85747702	
311	Magnet F.Gehäuse	Magnet	303-85893005	
G100	33" Gehäuse graphit	Cabinet	750-86277705	L00
G100	33" Gehäuse brillantsilber CAL	Cabinet	750-86277707	T00
G101	Zwischenstück natur	Cover	568-85727101	T00
G101	Zwischenstück schwarz	Cover	568-85727102	L00
G110	Rückwand graphit 33"	Backcover	775-86278712	L00
G110	Rückwand brillantsilber 33"	Backcover	775-86278715	T00
G111	Zwischenstück natur	Cover	568-85727101	T00
G111	Zwischenstück schwarz	Cover	568-85727102	L00
G310	Klappe/Bed. brillantsilber vorm. USA	Cover Plate	706-85748081	T00
G310	Klappe/Bedien.vorm. graphit USA	Cover Plate	706-85748082	L00
G350	Ziergitter graphit	Speaker Grille	708-86276005	L00
G350	Ziergitter brillantsilber	Speaker Grille	708-86276007	T00
H0730	Chassishalter rechts	Holder	602-81482121	
H0731	Chassishalter links	Holder	602-81481101	
H0732	Gewindelasche M 4 F.RW-Befestigung	Guide Strap	561-81547101	
H1996	Abdeckung	Mask	703-87883711	
V0000	33Z „PH“A80-EFF002X43	Picture Tube	345-26133	
	SPULEN/LAUTSPRECHER	**COILS, SPEAKERS**		
800	Lautsprecher 4 Ohm 20W TT	Loudspeaker	272-87846	
810	Lautsprecher 4 Ohm 20W HT	Loudspeaker	272-86411	
L6001	Entmagn. Spule 32/33" A2400	Coil	297-88037001	

CAL 2323 — Art.-Nr. 59414.00

Pos.Nr. Item N°.	Bestell-Bezeichnung	Description	Bestell-Nr. List Part N°.	Var. Var.
	ALLGEM.MECHAN.TEILE	**COMMON MECHANICAL PARTS**		
305	Clamper	Cable Binding	530-21237	
	INTEGR.SCHALTUNGEN	**INTEGRATED CIRCUITS**		
I1891	ICMOS ST24E36F6 A2400 Progr.A700..	Integrated Circuit	349-90577700	00

Klappe/Bed. vorm. / Cover Plate premounted — Art.-Nr. 85748.081-082

Pos.Nr. Item N°.	Bestell-Bezeichnung	Description	Bestell-Nr. List Part N°.	Var. Var.
	KNÖPFE	**BUTTONS**		
30	Knopf III/Netzsch. sw.	Button	682-85877002	
	GEHÄUSETEILE	**CABINET MOUNTING**		
10	Klappe/Bedienung graphit	Cover Plate	706-85748005	082
10	Klappe/Bedienung brillantsilber	Cover Plate	706-85748107	081
20	Magnet f. Klappe	Magnet	303-85893004	
40	Druckfeder f. Knopf/Netzsch.	Compression Spring	726-85878001	
50	Infrarot-Fenster für Bedienteil	Window	666-84571101	
60	Lagerbock (Scharnier) f. Klappe	Bearing Bracket	642-82773101	

VGA-EBS — Art.-Nr. 87808.002

Pos.Nr. Item N°.	Bestell-Bezeichnung	Description	Bestell-Nr. List Part N°.	Var. Var.
	BAUGRUPPEN	**UNITS**		
10	LPL.VGA-/IR-Adapter A2400 kpl.	Print Circuit Board	396-87717060	002
	ALLGEM.MECHAN.TEILE	**COMMON MECHANICAL PARTS**		
30	Bolzen 4-40UNC KFS-4S-B1W	Bolt	579-28642 87808002	

ACO 9303 — Art.-Nr. 59471.00

Pos.Nr. Item N°.	Bestell-Bezeichnung	Description	Bestell-Nr. List Part N°.	Var. Var.
	BAUGRUPPEN	**UNITS**		
830	LPL. Frequenzweiche kpl.	Print Circuit Board	396-85729063	
970	VGA EBS A2400	Scaffolding Access	291-87808002	
980	Adapter A2400 kpl.	Print Circuit Board	396-87957050	
U0004	Rotation-Panel Q2300	Print Circuit Board	396-87281051	
U2400	BAS-B. kpl. A2400 TU-USP99,US/32" ..	Print Circuit Board	396-87715074	
U2401	SIG-B. kpl. A2400	Print Circuit Board	396-87934050	
U3371	Bildrohrpl./SVM kpl. A2400 16:9 (RF)	Print Circuit Board	396-87833055	
U8211	Modul-Bedienung kpl. ACO A2400	Print Circuit Board	396-87819081	
	DRUCKSACHEN	**OPERATING INSTRUCTIONS**		
500	BAN für USA-Geräte -GB-	Operating Instruction	233-27832002	
570	Garantie- und Antwortkarte USA	Guaranty Card	224-28352	
580	Bed.-Kurzanleitung USA	Operating Instruction	233-28345002	
	GERÄTEBEIPACK	**SET SUPPLEMENT**		
A0640	Mikrozelle 1,5V Alkali-Mangan	Battery	280-13411	
N402	Subwoofer Adapter	Socket	323-86788	
U0002	Adapter Antenne IEC-F männlich	Socket	323-28138	
U9111	IR-Fernbedienung Control USA arktis .	Transmitter	263-87000063	
	VERPACKUNGSMATERIAL	**PACKING MATERIAL**		
102	Schutzstreifen 1600 x 1250 mm	Protective Packing	253-84666022	
600	Faltschachtel USA	Packing Case	245-87749702	
610	Packschalen-Satz 32" ACO	Cushion-Set	252-87742050	
J0701	Schutzstreifen 350 x 190 mm(IR-G.) ...	Protective Packing	253-84666004	
	VERBINDUNGSLEITUNG	**CONNECTING CABLES**		
N8102	Netzkabel USA m. Drossel 3200lg	Power Cord	170-87684002	
	KNÖPFE	**BUTTONS**		
320	Tastenset für Servicefunktionen schwarz	Button	682-87685121	
350	Knopf/Netzschalter schwarz	Button	682-86697002	
	GEHÄUSETEILE	**CABINET MOUNTING**		
101	EJOT-PT-Schraube 10,0x45 K100x45	Screw	440-19149	
103	Führungsschiene	Guide	553-87855001	
105	Gehäusefuss farblos	Foot	783-82251105	
106	Stütze	Support	551-87854001	
113	EJOT-PT-Schraube 4,0x14 KB40x14 .	Screw	440-27773	
114	Filzstreifen 0,5x5x340mm	Felt Strip	414-28825	
115	Klebestreifen f. Rückwand	Foam Plastics Ledge	411-20926	
200	Distanzstück	Clutch Piece	503-24754	
230	Halter/Entmagn.	Holder	602-87243001	
301	Spaxschraube 4x13	Screw	443-18169	
311	Magnet D 8x4	Magnet	303-28596	
	GEHÄUSETEILE	**CABINET MOUNTING**		
330	Ölsilikondämpfer	Gear Wheel	616-28668	
331	Schraube EJOT-PT 3,0x8 KB30x8	Screw	440-23640	
710	32Z „PH“W76-ERF031X044	Picture Tube	345-28611	
741	Halter	Holder	602-85997101	
742	Ring	Clutch Piece	503-85996101	

ACO 9303 — Art.-Nr. 59471.00

Pos.Nr. Item N°.	Bestell-Bezeichnung	Description	Bestell-Nr. List Part N°.	Var. Var.
G100	Gehäuse hochgl.-schwarz	Cabinet	750-87747702	L00
G100	Gehäuse ST-rotbraun	Cabinet	750-87747704	V00
G100	Gehäuse ST-blau	Cabinet	750-87747705	J00
G100	Gehäuse Stratos-metallic	Cabinet	750-87747706	H00
G110	Rückwand schwarz	Backcover	775-87748702	
G111	Zwischenstück schwarz	Cover	568-85727102	
G112	Abdeckung Rückwand	Mask	703-87756102	
G310	Klappe kpl. HGL-schwarz	Cover Plate	706-87745101	L00
G310	Klappe kpl. ST-rotbraun	Cover Plate	706-87745104	V00
G310	Klappe kpl. ST-blau	Cover Plate	706-87745105	J00
G310	Klappe kpl. Stratos-metallic	Cover Plate	706-87745106	H00
G311	Scharnier für Klappe	Hinge	573-87744101	
G350	Ziergitter	Speaker Grille	708-87746102	
H1996	Abdeckung	Mask	703-87883711	
	SPULEN/LAUTSPRECHER	**COILS,SPEAKERS**		
800	Lautsprecher 4 Ohm 20W TT	Loudspeaker	272-87846	
810	Lautsprecher 4 Ohm 20W HT	Loudspeaker	272-86411	
L6001	Entmag. Spule 32/33" A2400	Coil	297-88037001	
L6002	Spule Rotation	Coil	297-26753	
	ALLGEM.MECHAN.TEILE	**COMMON MECHANICAL PARTS**		
305	Clamper	Cable Binding	530-21237	
306	Kabelhalter auf Kühlblech NF	Cable Binding	530-20935	
H1995	EJOT-PT-Schraube 4,0x14 KB40x14	Screw	440-27773	
	INTEGR.SCHALTUNGEN	**INTEGRATED CIRCUITS**		
I1891	ICMOS ST24E36F6 A2400 Progr.A800	Integrated Circuit	349-90577800	00

VGA-EBS — Art.-Nr. 87808.002

Pos.Nr. Item N°.	Bestell-Bezeichnung	Description	Bestell-Nr. List Part N°.	Var. Var.
	BAUGRUPPEN	**UNITS**		
10	LPL.VGA-/IR-Adapter A2400 kpl.	Print Circuit Board	396-87717060	002
	ALLGEM.MECHAN.TEILE	**COMMON MECHANICAL PARTS**		
30	Bolzen 4-40UNC KFS-4S-B1W	Bolt	579-28642 87808002	

PLA 5303 — Art.-Nr. 59470.00

Pos.Nr. Item N°.	Bestell-Bezeichnung	Description	Bestell-Nr. List Part N°.	Var. Var.
	BAUGRUPPEN	**UNITS**		
970	VGA EBS A2400	Scaffolding Access	291-87808002	
980	Adapter A2400 kpl.	Print Circuit Board	396-87957050	
G310	Bedieneinheit kpl. schwarz USA	Control Unit	810-87076084	L00
G310	Bedieneinheit kpl. arktis USA	Control Unit	810-87076085	U00
U0003	Frequenzweiche-Platte	Print Circuit Board	396-85729062	
U0004	Rotation-Panel Q2300	Print Circuit Board	396-87281051	
U2400	Bas-B. kpl. A2400 TU-USP99,US/32"	Print Circuit Board	396-87715071	
U2401	Sig-B. kpl. A2400	Print Circuit Board	396-87934050	
U3371	Bildrohrpl./SVM kpl. A2400 16:9	Print Circuit Board	396-87833054	
	DRUCKSACHEN	**OPERATING INSTRUCTIONS**		
500	BAN für USA-Geräte -GB-	Operating Instruction	233-27832002	
570	Garantie- und Antwortkarte USA	Guaranty Card	224-28352	
580	Bed.-Kurzanleitung USA	Operating Instruction	233-28345002	
	GERÄTEBEIPACK	**SET SUPPLEMENT**		
502	Adapter-Winkel System f ST-Buchse	Socket	323-28805	
A0640	Mikrozelle 1,5V Alkali-Mankan	Battery	280-13411	
N402	Subwoofer Adapter	Socket	323-86788	
U0002	Adapter Antenne IEC-F männlich	Socket	323-28138	
U9111	IR-Fernbedienung Control USA arktis	Transmitter	263-87000063	
	VERPACKUNGSMATERIAL	**PACKING MATERIAL**		
103	Schutzstreifen (A)	Protective Packing	253-20816	
600	Verpackungskarton PLA	Packing Case	245-87143702	
610	Packschalen-Satz 32" PLA	Cushion-Set	252-87079050	
J0701	Schutzstreifen 350 x 190 mm(IR-G.)	Protective Packing	253-84666004	
	GEHÄUSETEILE	**CABINET MOUNTING**		
102	Filzzuschnitt 30x5x1 für RW	Felt Strip	414-27413	
111	Halter/Rückwand	Holder	602-86757011	
112	EJOT-PT-Schraube SW KB40x20 f. RW	Screw	440-25382	
113	EJOT-PT-Schraube 4,0x14 KB40x14	Screw	440-27773	
200	Distanzstück	Clutch Piece	503-24754	
201	EJOT-PT-Schraube 10,0x45 K100x45	Screw	440-19149	
230	Halter/Entmag.	Holder	602-87243001	
709	Konvergenz-Minipol	Deflection Unit	278-26996	
710	32Z „PH“W76-ESF031X44	Picture Tube	345-26377	
741	Halter Rotation Panel	Holder	602-85997131	
821	U-Klammer für Lautsprecher	Fixing Set	731-25465	
	GEHÄUSETEILE	**CABINET MOUNTING**		
G100	FFS-Gehäuse schwarz 32"	Cabinet	750-87074702	L00
G100	FFS-Gehäuse arktis 32"	Cabinet	750-87074703	U00
G101	Zwischenstück natur	Cover	568-85727101	U00
G101	Zwischenstück schwarz	Cover	568-85727102	L00
G110	Rückwand schwarz USA 32"	Backcover	775-87075712	L00
G110	Rückwand arktis USA 32"	Backcover	775-87075713	U00
G120	Klappe schwarz für Rückwand	Cover Plate	706-86556002	L00
G120	Klappe hellgrau metallic für Rückwand	Cover Plate	706-86556003	U00

PLA 5303 — Art.-Nr. 59470.00

Pos.Nr. Item N°.	Bestell-Bezeichnung	Description	Bestell-Nr. List Part N°.	Var. Var.
G350	Ziergitter schwarz	Speaker Grille	708-87077012	L00
G350	Ziergitter arktis	Speaker Grille	708-87077013	U00
H1996	Abdeckung	Mask	703-87883711	
	SPULEN/LAUTSPRECHER	**COILS,SPEAKERS**		
800	Lautsprecher 8 Ohm 11W	Loudspeaker	272-86074	
810	Lautsprecher 8 Ohm 16 W	Loudspeaker	272-87474	
820	Lautsprecher 8 Ohm Hochton	Loudspeaker	272-85273	
L6001	Entmagn. Spule 32/33" A2400	Coil	297-88037001	
L6002	Spule Rotation	Coil	297-26753	
	ALLGEM.MECHAN.TEILE	**COMMON MECHANICAL PARTS**		
195	Clamper	Cable Binding	530-21237	
INTEGR.SCHALTUNGEN		INTEGRATED CIRCUITS		
I1891	ICMOS ST24E36F6 2400 Progr.A800 ..	Integrated Circuit	349-90577800	00

VGA-EBS — Art.-Nr. 87808.002

Pos.Nr. Item N°.	Bestell-Bezeichnung	Description	Bestell-Nr. List Part N°.	Var. Var.
	BAUGRUPPEN	**UNITS**		
10	LPL.VGA-/IR-Adapter A2400 kpl.	Print Circuit Board	396-87717060	002
	ALLGEM.MECHAN.TEILE	**COMMON MECHANICAL PARTS**		
30	Bolzen 4-40UNC KFS-4S-B1W	Bolt	579-28642 87808002	

Basic Board — Art.-Nr. 87715.071/073/074

Pos.Nr. Item N°.	Bestell-Bezeichnung	Description	Bestell-Nr. List Part N°.	Var. Var.
	BAUGRUPPEN	**UNITS**		
30	Dyn. Focusblock (Focus/UG2)	Scaffolding Access.	291-28956	071
30	Dyn. Focusblock (Focus/UG2)	Scaffolding Access.	291-28956	074
R619	LPL. Degaussing Modul kpl.	Print Circuit Board	396-87862050	
U0001	Dyn. Focusblock (Focus/UG2)	Scaffolding Access.	291-26627	071
U100	Tuner-ZF (USP)	Tuner	260-87507050	073
U202	Tuner-ZF USP99	Tuner	260-87507051	
U203	Tuner-ZF US	Tuner	260-87346050	
	SPULEN	**COILS**		
L202	Dr. 47U K SMCC Fastron	Choke	298-16925	
L203	Dr. 4330 030 38100 VAL	Choke	298-14399	
L534	Dr. 150U K	Choke	298-79726020	
L537⚠	Dr. 200U	Choke	297-23662	
L538	Lin-Regler 4,6UH	Deflection Unit	278-24475	071
L538	Lin-Regler	Deflection Unit	278-26787	074

Basic Board — Art.-Nr. 87715.071/073/074

Pos.Nr. Item N°.	Bestell-Bezeichnung	Description	Bestell-Nr. List Part N°.	Var. Var.
L538	Lin-Regler 5,4UH	Deflection Unit	278-27544	073
L543	Dr. 572 05 018 00 Vogt	Choke	298-27471Y03	
L553	Dr. 50U DR270/5 Kaschke	Choke	298-22381	074
T528	Treiberspule Vogt 527.01.035.00	Coil	297-23664	
T531⚠	Zeilentrafo Q2300	Line Transformer	276-27373	071
T531⚠	Zeilentrafo Q23/41/24/4140	Line Transformer	276-27397	073
T531⚠	Zeilentrafo	Line Transformer	276-28032	074
T540	Trafo AT 4043/67A	Power Transformer	490-21351	071
T540	Trafo AT 4043/67A	Power Transformer	490-21351	074
T612	Dr. 2x 10M 3,0A RK28 Plasma	Choke	298-27507	
T639⚠	Trafo Wandler A2400	Power Transformer	490-28839	071
T639⚠	Trafo Wandler A2400 33"	Power Transformer	490-28841	073
T639⚠	Trafo Wandler A2400	Power Transformer	490-29034	073
	ALLGEM.MECHAN.TEILE	**COMMON MECHANICAL PARTS**		
20	Aufsteckkühlkörper	Screening	509-27369	
30	Linsenschraube AM 3 X10 Bruen	Screw	432-74571	
H474	Montageclip	Spring	739-87529001	
H484	Montageclip	Spring	739-87529001	
H509	Montageclip	Spring	739-87529001	
H534	Montageclip	Spring	739-87529001	
H539	Montageclip	Spring	739-87529001	
H560	Montageclip	Spring	739-87529001	
H561	Montageclip	Spring	739-87529001	
H562	Glimmerscheibe 16x21	Insulating Piece	421-10881	
H586	Montageclip	Spring	739-87529001	
	ALLGEM.MECHAN.TEILE	**COMMON MECHANICAL PARTS**		
H587	Glimmerscheibe 16x21	Insulating Piece	421-10881	
H611	Sicherungshalter für SI 5x20	Fuseholder Spring	730-20061	
H624	Montageclip	Spring	739-87529001	
H625	Glimmerscheibe 16x21	Insulating Piece	421-10881	073
H652	Montageclip	Spring	739-87529001	
H663	Montageclip	Spring	739-87529001	
H671	Montageclip	Spring	739-87529001	
H674	Montageclip	Spring	739-87529001	
	INTEGR.SCHALTUNGEN	**INTEGRATED CIRCUITS**		
10	IC L 7808 ACV	Integrated Circuit	349-21780Y20	
10	IC L 78S09CV geschnitten	Integrated Circuit	349-24013Y18	
10	IC L 78 S 09 CV	Integrated Circuit	349-24013Y22	
I474	IC TDA 7296	Integrated Circuit	349-28414	
I484	IC TDA 7296	Integrated Circuit	349-28414	
I561	IC TDA8177	Integrated Circuit	349-26528	
I569	IC TL 431ACLP	Integrated Circuit	349-19817020	
I611⚠	IC TDA4605-3/TDA4605	Integrated Circuit	349-22113	
I663	IC L 7808ACV vormontiert	Integrated Circuit	349-21780050	
I669⚠	Opto-Koppler DIP4 80V 50/80 mA	Coupler	353-28638	
I670	IC TL 431ACLP	Integrated Circuit	349-19817020	
I674	IC TL 431ACLP	Integrated Circuit	349-19817020	

Basic Board — Art.-Nr. 87715.071/073/074

Pos.Nr. Item N°.	Bestell-Bezeichnung	Description	Bestell-Nr. List Part N°.	Var. Var.
I676	**IC TL 431ACLP**	**Integrated Circuit**	**349-19817020**	
I691	IC L 78S09CV vormontiert	Integrated Circuit	349-24013050	073
I691	IC L 78S09CV vormontiert	Integrated Circuit	349-24013051	
	TRANSISTOREN	**TRANSISTORS**		
10	Powmos TO220FP NCH 600V 8A	Transistor	346-22395	
10	TO220FP PNP 80V 3A 24W	Transistor	346-28633	
10	2SC5302 NPN 1500V 10A 50W	Transistor	346-28864	
Q508	BD537 TO220A	Transistor	346-77764	
Q511	BF422 TO92	Transistor	346-11562020	
Q526	TO92 NPN 100V 2A 1W	Transistor	346-20796020	
Q531	ZTX712 E-Line	Transistor	346-27659020	
Q532	ZTX614 E-Line	Transistor	346-27660020	
Q533	BF422 TO92	Transistor	346-11562020	
Q534	2SC4542 vormontiert	Transistor	346-25708Y20	073
Q534	2SC5302	Transistor	346-28864Y20	
Q562	Powmos TO220FP NCH 50V 10A 30W	Transistor	346-18528	
Q582	BC556B	Transistor	346-74967020	
Q585	BC547B TO92	Transistor	346-74983020	
Q586	BD537 TO220A	Transistor	346-77764	
Q589	BC557B	Transistor	346-74878020	
Q593	BC557B	Transistor	346-74878020	
Q624	Powmos TO220FP NCH 600V 8A	Transistor	346-22395	073
Q624	Powmos TO220 600V 8A geschn.	Transistor	346-22395Y20	
Q646	Powmos TO220FP NCH 50V 10A 30W	Transistor	346-18528	073
Q646	BUZ 71AF1	Transistor	346-18528Y22	
Q648	BC547B TO92	Transistor	346-74983020	
Q661	BC547B TO92	Transistor	346-74983020	
Q663	Powmos TO220FP NCH 50V 10A 30W	Transistor	346-18528	
Q674	Powmos TO220FP NCH 50V 10A 30W	Transistor	346-18528	
Q681	BC557B	Transistor	346-74878020	
Q682	Silpow TO220FP PNP 80V 3A 24W	Transistor	346-28633Y22	073
	DIODEN	**DIODES**		
10	3,0A 40V DO27 Schottky	Diode	352-12657	
10	10A 200V ISOWATT220AC	Diode	352-28625	
10	10A 200V geschnitten	Diode	352-28625Y20	
D206	ZD 30V0 2%	Diode	352-15763	
D474	1 N 4148 DO35	Diode	352-31818	
D491	1 N 4148 DO35	Diode	352-31818	
D526	1 N 4148 DO35	Diode	352-31818	
D527	EU 02V0	Diode	352-20289	
D531	1,0A 400V DO41 Fast-GP	Diode	352-20685	
D532	BYW 98 RM15	Diode	352-20535	
D533	BA 157	Diode	352-44799	
D539	ESC011M	Diode	352-23667	
D541	BA 157	Diode	352-44799	
D546	BA 157	Diode	352-44799	
D547	BA 159	Diode	352-49148	
D548	1 N 4148 DO35	Diode	352-31818	

Basic Board — Art.-Nr. 87715.071/073/074

Pos.Nr. Item N°.	Bestell-Bezeichnung	Description	Bestell-Nr. List Part N°.	Var. Var.
D549	ZD 30V0 2%	Diode	352-15763	
D557	1,0A 400V DO41 Fast-GP	Diode	352-20685	
D558	1,0A 400V DO41 Fast-GP	Diode	352-20685	
D561	BA 157	Diode	352-44799	
D584	ZD 30V0 2%	Diode	352-15763	
D589	BA 157	Diode	352-44799	
D590	BA 157	Diode	352-44799	
D613	Gleichrichter FBI5L1M1 900V/5A	Rectifier	354-27910Y22	
D622	BA 157	Diode	352-44799	
D624	BYT 13-1000 RM15	Diode	352-22712	
D636	BA 157	Diode	352-44799	
D647	3,0A 40V DO27	Diode	352-12657Y10	
D652	BYT08PI-1000	Diode	352-28613	
D656	BYW 98 RM15	Diode	352-25838	
D660	ZD 12V0	Diode	352-44202	
D661	BYW 98 RM15	Diode	352-20535	073
D663	BYW80-200F vormontiert	Diode	352-28625050	
D666	SD 103C Schottky-Diode	Diode	352-17741	
D669	1 N 4148 DO35	Diode	352-31818	
D670	ZD 30V0 2%	Diode	352-15763	
D671	STPS20L40CF geschnitten/gebogen	Diode	352-20296Y20	
D672	ZD 3V9 DO35 5% 0,5W	Diode	352-10526	
D680	ZD ZPY 100	Diode	352-28686	
D681	BA 157	Diode	352-44799	
D686	BYW 98 RM15	Diode	352-25838	
D687	BYW 98 RM15	Diode	352-25838	
	POTENTIOMETER	**POTENTIOMETERS**		
P662	1K 6mm Kohleschicht horizont.	Potentiometer	375-22863020	
SICHERUNGEN		FUSES		
F611⚠	6000 mA F 125V 5x20	Fuse	380-27938	
F656⚠	1250 mA T 250V 8x8	Fuse	380-27943020	
F661⚠	4000 mA F 250V 8x8	Fuse	380-28944020	
F672⚠	5000 mA T 250V 8x8	Fuse	380-27940020	
	KONDENSATOREN	**CAPACITORS**		
10	470N J 100V R5	Capacitor	359-28078020	071
10	470N J 100V R5	Capacitor	359-28078020	074
C531⚠	2N7 J1600V R15	Capacitor	359-25292	071
C531⚠	3N0 J1600V R15	Capacitor	359-25293	073
C531⚠	2N2 J1600V R15	Capacitor	359-26835	074
C538	Elko 47µ M 250V R7,5 18,5x41,5	Electrolyt Capacitor	360-22941	
C539	470P J 1600V RM15	Capacitor	359-28273	073
C540	Elko 2µ2 M 350V R 5,0 10x16	Electrolyt Capacitor	360-28102020	
C541⚠	9N1 H R22,5	Capacitor	359-26619	071
C541⚠	7N5 H2000V R22,5 8,5x17x26,5	Capacitor	359-27603	073
C541⚠	7N5 H2000V R22,5 8,5x17x26,5	Capacitor	359-27603	074
C542	600N J 250V R22,5 11x21x27	Capacitor	359-24450	073
C542	520N J 250V R22,5 11x21	Capacitor	359-25886	074

Pos.Nr. Item N°.	Bestell-Bezeichnung	Description	Bestell-Nr. List Part N°.	Var. Var.
C542	680N J 250V R22,5 9	Capacitor	359-28116	071
C543⚠	22N J 630V R15	Capacitor	359-26531	073
C543⚠	22N J 630V R15	Capacitor	359-26531	074
C543⚠	25N J 630V	Capacitor	359-27012	071
C544	750N J 250V R27,5 13x24x32	Capacitor	359-16573	073
C544	680N J 250V R22,5 9	Capacitor	359-28116	074
C544	900N J 160VW (250 V-)	Capacitor	359-73806	071
C545	390P J 2000V RM15	Capacitor	359-28868	071
C545	390P J 2000V RM15	Capacitor	359-28868	074
C546	470P K1000V R5	Capacitor	357-23994020	
C546	220N J 100V R5 5x10x7,2	Capacitor	359-27013020	
C548	Elko 22µ S 250V R5 10x22 360-8	Electrolyt Capacitor	360-11762020	
C551	Elko 22µ S 250V R5 10x22 360-8	Electrolyt Capacitor	360-11762020	
C553	390P J 2000V RM15	Capacitor	359-28868	071
C553	390P J 2000V RM15	Capacitor	359-28868	074
C568	470N J 100V R5	Capacitor	359-28078020	
C611	220N M 275VW R15 5 x2	Capacitor	359-77769	
C612⚠	220N M 275VW R15 5 x2	Capacitor	359-77769	
C613⚠	220N M 275VW R15 5 x2	Capacitor	359-77769	
C614⚠	330P M 400VW R10	Capacitor	357-73804Y01	
C616	Elko 680µ M 250V R10 25x50	Electrolyt Capacitor	360-27739	
C618	Elko 680µ M 250V R10 25x50	Electrolyt Capacitor	360-27739	
C619	100N M 250VW R15 5 x2	Capacitor	359-23372	
C621	470N J 100V R5	Capacitor	359-28078020	
C626	33N J 630V R15 Polypropylen	Capacitor	359-22129	
C627	470P J1500V R15	Capacitor	359-18821	
C639⚠	2N2 M 400VW	Capacitor	357-14192	073
C639⚠	2N2 M 400VW	Capacitor	357-14192Y02	
C650	150P K1600V R15 5x11x18	Capacitor	359-13943	
C651	Elko 47µ M 250V R7,5 18,5x41,5	Electrolyt Capacitor	360-22941	
C682	680P K 500V R5	Capacitor	357-21183020	
	WIDERSTÄNDE	**RESISTORS**		
10	0R1 K SI 0207	Resistor	366-10905	
10	15K G 0204	Resistor	367-14985	074
10	22K G 0204	Resistor	367-20331	071
10	1K8 G 0204	Resistor	367-20334	
10	39K G 0414 2,00W	Resistor	367-21058	071
B590	1R K SI0207	Resistor	366-12276	
B673	1R J 0207	Resistor	366-20649	
B674	1R J 0207	Resistor	366-20649	
B693	8K2 J 0207	Resistor	367-19613	071
B693	8K2 J 0207	Resistor	367-19613	074
R206	6K8 J 0207	Resistor	366-20652	071
R206	6K8 J 0207	Resistor	366-20652	074
R206	18K G 0207	Resistor	367-11559	
R206	8K2 J 0207	Resistor	367-19613	071
R206	8K2 J 0207	Resistor	367-19613	074

Basic Board **Art.-Nr. 87715.071/073/074**

Pos.Nr. Item N°.	Bestell-Bezeichnung	Description	Bestell-Nr. List Part N°.	Var. Var.
R207	6K8 J 0207	Resistor	366-20652	071
R207	6K8 J 0207	Resistor	366-20652	074
R207	18K G 0207	Resistor	367-11559	
R207	8K2 J 0207	Resistor	367-19613	071
R207	8K2 J 0207	Resistor	367-19613	074
R208	5K6 J 0207	Resistor	366-28964	071
R208	5K6 J 0207	Resistor	366-28964	074
R209	5K6 J 0207	Resistor	366-28964	071
R209	5K6 J 0207	Resistor	366-28964	074
R466	470R J 0617 3,00W R20	Resistor	367-20648	
R468	470R J 0617 3,00W R20	Resistor	367-20648	
R479	220R J 0207	Resistor	366-15679	
R489	220R J 0207	Resistor	366-15679	
R491⚠	3R3 K SI 0207 0,33W	Resistor	366-11790	
R511	150K F 0204	Resistor	367-19004	
R512	10K F 0204	Resistor	367-20347	
R516	22R J 0207	Resistor	366-20655	
R517	22R J 0207	Resistor	366-20655	
R518	10R J 0207	Resistor	366-77101	
R521⚠	3R3 K SI 0207 0,33W	Resistor	366-11790	
R521⚠	3R3 J SI 0207 0,50W	Resistor	366-27701	073
R524	4K7 J 0207	Resistor	366-40343	
R525	4K7 J 0207	Resistor	366-40343	
R527	4K7 J 0207	Resistor	366-40343	
R528	4K7 J 0207	Resistor	366-40343	
R529	4K7 J 0207	Resistor	366-40343	
R530	4K7 J 0207	Resistor	366-40343	
R531⚠	3R3 J SI 0207 0,50W	Resistor	366-27701	
R532	0R68 K 4,00W R15	Resistor	368-21294	
R533	12R F 0207	Resistor	367-21330	
R534⚠	3R3 J SI 0207 0,50W	Resistor	366-27701	
R535	100K J 0207	Resistor	366-16330	
R538	100K J 0207	Resistor	366-16330	
R539	100K J 0207	Resistor	366-16330	
R540⚠	47R J SI 0411 0,75W	Resistor	368-28118	
R541⚠	3R3 J SI 0207 0,50W	Resistor	366-27701	
R542⚠	1K2 F 0204	Resistor	367-17324	073
R542⚠	1K8 G 0204	Resistor	367-20334	
R543	1K5 J 0414 1W R15	Resistor	367-20657	
R545⚠	3R3 J SI 0207 0,50W	Resistor	366-27701	071
R545⚠	3R3 J SI 0207 0,50W	Resistor	366-27701	074
R546	220R J 0207	Resistor	366-15679	
R547⚠	3R3 J SI 0207 0,50W	Resistor	366-27701	
R548⚠	220R J 0207	Resistor	366-15679	073
R549	150K G 0207	Resistor	367-10898	
R550⚠	2K2 G 0207	Resistor	366-81024	
R551	150K G 0207	Resistor	367-10898	
R553	220R J 0207	Resistor	366-15679	

Basic Board — Art.-Nr. 87715.071/073/074

Pos.Nr. Item N°.	Bestell-Bezeichnung	Description	Bestell-Nr. List Part N°.	Var. Var.
R555	1K8 G 0204	Resistor	367-20334	
R557⚠	1R5 J SI R17,5 0,5 W	Resistor	366-20386	
R558⚠	1R5 J SI R17,5 0,5 W	Resistor	366-20386	
R560	10K F 0204	Resistor	367-20347	
R561	3K9 F 0204	Resistor	367-20341	
R565	40K2 F 0204	Resistor	367-26914	
R566	82K G 0207	Resistor	367-10885	
R567	470R J 0207	Resistor	366-20661	
R569	470R J 0207	Resistor	366-20661	
R574	0R82 K 4,00W R15	Resistor	368-11091	074
R574	0R68 K 4,00W R15	Resistor	368-21294	073
R574	1R J 2,00W R15	Resistor	368-22719	071
R578	82K G 0207	Resistor	367-10885	
R579	40K2 F 0204	Resistor	367-26914	
R583	390K G 0204	Resistor	367-16791	
R590	10R J 0207	Resistor	366-77101	
R591	1R J 0207	Resistor	366-20649	
R592	1R J 0207	Resistor	366-20649	
R612	0R56 J 10,0W	Resistor	368-28210	
R613	0R68 J 7,00W R22,5	Resistor	368-27914	
R619	DUO-PTC 3R	PTC Resistor	372-27970	073
R621	56K J 0414 1,00W R15	Resistor	367-22396	
R622	820K J 0207	Resistor	366-16437	
R625	680K J 0207	Resistor	367-27264	
R626	22R J 0207	Resistor	366-20655	
R628	39K J 3W RM20	Resistor	367-22403	
R629	22R J 0207	Resistor	366-20655	
R632⚠	82R J 0207	Resistor	366-12554	
R633⚠	2K2 J 0207	Resistor	366-81024	
R634	680K J 0207	Resistor	367-27264	
R639⚠	10M J 0411	Resistor	367-19664	
R639⚠	10M J 0411	Resistor	367-27946	
R647	100K J 0207	Resistor	366-16330	
R651	18K G 0207	Resistor	367-11559	
R652⚠	1R K SI0207	Resistor	366-12276	
R653	100R J 0207	Resistor	366-73257	
R654	100R J 0207	Resistor	366-73257	
R660	1K8 G 0204	Resistor	367-20334	
R660	1K8 G SI 0204 geschnitten	Resistor	367-20334Y03	073
R661⚠	33K F 0204	Resistor	367-18769	073
R661⚠	39K F 0204	Resistor	367-28894	071
R661⚠	39K F 0204	Resistor	367-28894	073
R662⚠	3K6 G 0204	Resistor	367-11486	071
R662⚠	3K6 G 0204	Resistor	367-11486	073
R662⚠	3K3 F 0204	Resistor	367-14897	074
R663⚠	220K F 0207	Resistor	367-28413	
R665	56K J 0414 1,00W R15	Resistor	367-22396	
R666	18K F 0204	Resistor	367-18527	

Basic Board — Art.-Nr. 87715.071/073/074

Pos.Nr. Item N°.	Bestell-Bezeichnung	Description	Bestell-Nr. List Part N°.	Var. Var.
R668	Resistor	366-16330		
R681	3R3 J 0207	Resistor	366-77754	
R682	33R J 0207	Resistor	366-22944	
R683	470R J 0207	Resistor	366-20661	
R684	6K8 J 0207	Resistor	366-20652	
R685	68R J 3,00W RM20	Resistor	367-22942	073
R686⚠	0R1 K SI 0207	Resistor	366-10905Y09	
R687⚠	0R1 K SI 0207	Resistor	366-10905Y09	
R688	1R J 0207	Resistor	366-20649	
R689	1R J 0207	Resistor	366-20649	
R690⚠	1R K SI0207	Resistor	366-12276	
R691	100R J 0207	Resistor	366-73257	
R692	100R J 0207	Resistor	366-73257	

Tuner/ZF / Tuner/IF — Art.-Nr. 87507.051

Pos.Nr. Item N°.	Bestell-Bezeichnung	Description	Bestell-Nr. List Part N°.	Var. Var.
	VERBINDUNGSLEITUNG	**CONNECTING CABLES**		
50	Antennenkabel 2.4m mit Winkelstecker	Connecting Cable	169-27470001	051
	INTEGR.SCHALTUNGEN	**INTEGRATED CIRCUITS**		
I4500	IC TDA5637 SOT340	Integrated Circuit	350-27278	051
I4600	IC TSA5523M SOT266	Integrated Circuit	350-27275	051
I4800	IC TDA9817 SDIP24	Integrated Circuit	349-27337	051
I4800	IC TDA9817 TS-SSOP24	Integrated Circuit	350-28929	051
	DIODEN	**DIODES**		
D4203	BB 640 SOD323	Diode	351-26568	051
D4204	BB 535 SOD323	Diode	351-26570	051
D4222	BB 640 SOD323	Diode	351-26568	051
D4241	BB 640 SOD323	Diode	351-26568	051
D4242	BB 535 SOD323	Diode	351-26570	051
D4303	BB 639 SOD323	Diode	351-26571	051
D4304	BB 535 SOD323	Diode	351-26570	051
D4322	BB 639 SOD323	Diode	351-26571	051
D4341	BB 639 SOD323	Diode	351-26571	051
D4403	BB 535 SOD323	Diode	351-26570	051
D4422	BB 535 SOD323	Diode	351-26570	051
D4441	BB 535 SOD323	Diode	351-26570	051
D4508	BB 640 SOD323	Diode	351-26568	051
D4527	BB 639 SOD323	Diode	351-26571	051
D4551	BB 535 SOD323	Diode	351-26570	051
D4806	BAV 99W SOT323	Diode	351-27469	051
	QUARZE/FILTER	**QUARTZES**		
X4831	Piezo Filter 4,5 MHz	Ceramic Filter	386-27305020	051

Pos.Nr. Item N°.	Bestell-Bezeichnung	Description	Bestell-Nr. List Part N°.	Var. Var.
	SPULEN	**COILS**		
S4110	HF-Relais G5Y-1-H 5VDC	Relay	387-27950	050
L4193	Spule	Coil	297-27571001	050
L4201	Spule	Coil	297-27571001	050
L4202	Spule kpl.	Coil	297-28046001	050
L4231	Spule	Coil	297-27569001	050
L4232	Spule	Coil	297-27569001	050
L4233	Spule	Coil	297-27561001	050
L4301	Spule	Coil	297-27566001	050
L4302	Spule	Coil	297-27561001	050
L4311	Spule	Coil	297-27571001	050
L4331	Spule	Coil	297-27561001	050
L4332	Spule	Coil	297-27683001	050
L4342	Spule	Coil	297-27553001	050
L4351	Spule	Coil	297-27563001	050
L4352	Spule	Coil	297-27563001	050
L4401	Spule	Coil	297-27562001	050
L4402	Spule	Coil	297-27553001	050
L4411	Spule	Coil	297-27568001	050
L4422	Spule	Coil	297-27559001	050
L4431	Spule	Coil	297-27546001	050
L4432	Spule	Coil	297-27683001	050
L4441	Spule	Coil	297-27561001	050
L4442	Spule	Coil	297-27683001	050
L4451	Spule	Coil	297-27682001	050
L4452	Spule	Coil	297-27682001	050
L4503	Spule	Coil	297-27564001	050
L4523	Spule	Coil	297-27552001	050
L4543	Spule	Coil	297-27548001	050
L4546	Spule	Coil	297-27559001	050
L4816	Spule	Coil	297-27743	050
	INTEGR. SCHALTUNGEN	**INTEGRATED CIRCUITS**		
I4500	IC TDA 5637 BM SMD	Integrated Circuit	350-27278	050
I4600	IC TSA 5523 M SMD	Integrated Circuit	350-27275	050
I4800	IC TDA 9817 V1	Integrated Circuit	349-27337	050
	TRANSISTOREN	**TRANSISTORS**		
Q4110	BCR 198 W SMD	Transistor	344-27269	050
Q4210	BF 1100W-R SMD	Transistor	344-27268	050
Q4310	BF 1100W-R SMD	Transistor	344-27268	050
Q4410	BF 1100W-R SMD	Transistor	344-27268	050
Q4836	BC 847 B SMD	Transistor	344-14974	050
Q4853	BC 847 BW SMD	Transistor	344-27272	050
	DIODEN	**DIODES**		
D4110	BAS316 SOD323	Diode	351-27952	050
D4203	BB 640 SMD	Diode	351-26568	050
D4204	BB 535 SMD	Diode	351-26570	050
D4222	BB 640 SMD	Diode	351-26568	050

Tuner/ZF / Tuner/IF Art.-Nr. 87346.050

Pos.Nr. Item N°.	Bestell-Bezeichnung	Description	Bestell-Nr. List Part N°.	Var. Var.
D4241	BB 640 SMD	Diode	351-26568	050
D4242	BB 535 SMD	Diode	351-26570	050
D4303	BB 639 SMD	Diode	351-26571	050
D4304	BB 535 SMD	Diode	351-26570	050
D4322	BB 639 SMD	Diode	351-26571	050
D4341	BB 639 SMD	Diode	351-26571	050
D4403	BB 535 SMD	Diode	351-26570	050
D4422	BB 535 SMD	Diode	351-26570	050
D4441	BB 535 SMD	Diode	351-26570	050
D4508	BB 640 SMD	Diode	351-26568	050
D4527	BB 639 SMD	Diode	351-26571	050
D4551	BB 535 SMD	Diode	351-26570	050
D4806	BAV 99 W SMD	Diode	351-27469	050
	QUARZE / FILTER	**QUARTZES**		
08	Label weiß 42x10 bedruckt	Adhesive Label	220-21812050	050
10	Quarz 4,0 MHz R5	Crystal Oscillator	385-27752	050
X4651	Quarz 4,0 MHz HC49U3 R5	Crystal Oscillator	385-27752Y20	050
X4701	Filter OFW K 6263 K	Filter	290-25214	050
X4751	Filter OFW K 9461-M	Filter	290-25216Y20	050
X4831	Piezo Filter 4,5 MHz	Ceramic Filter	386-27305020	050
	SPEZIALTEILE	**SPECIAL PARTS**		
10	Filter OFW K 9461-M	Filter	290-25216	050
20	Deckel	Lid	501-87236011	050
21	Deckel	Lid	501-87236011	050
46	Abschirmung	Screening	509-87544001	050
47	Abschirmung	Screening	509-87545001	050
48	Abschirmung 3 (Tuner US)	Screening	509-87588001	050
P4821	Potentiometer 10K	Potentiometer	375-27744	050
W4100	Koax-Buchse	Socket	323-27599	050
W4150	Koax-Buchse	Socket	323-27599	050
W4200	Kontaktleiste 7-pol. RM 5,08	Contact Ledge	326-27320007	050
W4200	Kontaktleiste 7-pol.	Contact Ledge	326-27320017	050
W4800	Kontaktleiste 6-pol.	Contact Ledge	326-27320006	050
W4800	Kontaktleiste 6-pol.	Contact Ledge	326-27320016	050

Signal Board — Art.-Nr. 87934.050

Pos.Nr. Item N°.	Bestell-Bezeichnung	Description	Bestell-Nr. List Part N°.	Var. Var.
	ALLGEM.MECHAN.TEILE	**COMMON MECHANICAL PARTS**		
H1851	IC-Fassung 32-pol.	Socket	320-22087	050
H1891	IC-Fassung 8-pol.	Socket	320-80503	050
	INTEGR.SCHALTUNGEN	**INTEGRATED CIRCUITS**		
I1011	IC TEA6422D SO28	Integrated Circuit	350-25732	050
I1066	ICMOS Video-Schalter DMP8	Integrated Circuit	350-28875	050
I1116	IC TEA6415 SO20L	Integrated Circuit	350-25733	050
I1181	IC TEA6415 SO20L	Integrated Circuit	350-25733	050
I1198	ICMOS Video-Schalter DMP8	Integrated Circuit	350-28875	050
I1281	ICMOS TDA8501T SO24	Integrated Circuit	350-24917	050
I1321	ICMOS MSP3430G PLCC-68	Integrated Circuit	350-27818	050
I1341	IC MC 78L08ACP TO92	Integrated Circuit	349-24725020	050
I1466	IC VPC3230 MQFP80	Integrated Circuit	350-28398	050
I1491	ICMOS SAA4955HL LQFP44	Integrated Circuit	350-28823	050
I1492	ICMOS SAA4955HL LQFP44	Integrated Circuit	350-28823	050
I1496	ICMOS SAA4955HL LQFP44	Integrated Circuit	350-28823	050
I1501	ICMOS SAA4992 QFP160	Integrated Circuit	350-28572	050
I1516	ICMOS 74HCT 08 SO14	Integrated Circuit	350-15441	050
I1531	ICMOS SAA4977/106 QFP80	Integrated Circuit	350-28912	050
I1541	IC 3.3V 0,8A SO08 Volt. Regulat.	Integrated Circuit	350-27212	050
I1556	IC 78 L 05 ACP	Integrated Circuit	349-15209020	050
I1558	ICMOS 74LV00 D SO14	Integrated Circuit	350-28730	050
I1560	ICMOS 74LV00 D SO14	Integrated Circuit	350-28730	050
I1561	ICMOS 74LV00 D SO14	Integrated Circuit	350-28730	050
I1571	ICMOS HCT4046 SO16	Integrated Circuit	350-24220	050
I1607	ICMOS 74HCT123 SO16	Integrated Circuit	350-15562	050
I1641	IC TDA4780-V4	Integrated Circuit	349-27676	050
I1691	IC SDA9361-2 P-MQFP44	Integrated Circuit	350-28761	050
I1740	ICMOS Z 86130 SOIC18	Integrated Circuit	350-28372	050
I1781	ICMOS Z 86129 SOIC18	Integrated Circuit	350-28371	050
I1801	ICMOS SABC161RI-LF TQFP1	Integrated Circuit	350-27354	050
I1831	ICMOS 4,33V 20MA SO08 Reset-IC	Integrated Circuit	350-28905	050
I1845	ICMOS 4,33V 20MA SO08 Reset-IC	Integrated Circuit	350-28905	050
I1901	ICMOS VPC3233 QFP80	Integrated Circuit	350-28573	050
I1923	ICMOS SAA4955HL LQFP44	Integrated Circuit	350-28823	050
I1941	ICMOS 5275-3P-A PLCC68 f. USA	Integrated Circuit	350-29030	050
	BUCHSEN/FASSUNGEN	**SOCKETS**		
W1249	Buchse vertical Mini DIN 8-polig	Socket	323-28368	050
	DIODEN	**DIODES**		
D1591	0,2A 75V SOD80 LL4148	Diode	351-15015	050
D1595	BB 639 SOD323	Diode	351-26571	050
D1948	ZMM C3V0 SOD80 SMD	Diode	351-22085	050
D1994	0,2A 75V SOD80 LL4148	Diode	351-15015	050
	QUARZE/FILTER	**QUARTZES**		
X1282	Quarz 3,579545 MHz HC49U	Crystal Oscillator	385-17695	050
X1327	Quarz 18,432000 MHz HC49U	Crystal Oscillator	385-25502	050
X1483	Quarz 20,250000 MHz HC49U	Crystal Oscillator	385-26686	050

Signal Board — Art.-Nr. 87934.050

Pos.Nr. Item N°.	Bestell-Bezeichnung	Description	Bestell-Nr. List Part N°.	Var. Var.
X1701	Quarz 24,576000 MHz HC49U3H	Crystal Oscillator	385-24963	050
X1746	Quarz 32,768000 KHZ	Crystal Oscillator	385-24962	050
X1812	Quarz 11,059200 MHz HC49U	Crystal Oscillator	385-14721	050
X1917	Quarz 20,250000 MHz HC49U	Crystal Oscillator	385-26686	050
X1958	Quarz 20,480000 MHz HC49U	Crystal Oscillator	385-24044	050
	WIDERSTÄNDE	**RESISTORS**		
R1011⚠	10R J SI 0207 0,25W R5	Resistor	366-20353	050
R1046⚠	10R J SI 0207 0,25W R5	Resistor	366-20353	050
R1116⚠	10R J SI 0207 0,25W R5	Resistor	366-20353	050
R1127⚠	10R J SI 0207 0,25W R5	Resistor	366-20353	050
R1156⚠	10R J SI 0207 0,25W R5	Resistor	366-20353	050
R1181⚠	10R J SI 0207 0,25W R5	Resistor	366-20353	050
R1242⚠	10R J SI 0207 0,25W R5	Resistor	366-20353	050
R1261⚠	10R J SI 0207 0,25W R5	Resistor	366-20353	050
	SMD TEILE	**SMD PARTS**		
D1001	Diode ZD 5V6 SOD80 ZMM C ITT	Diode	351-16758	050
D1002	Diode ZD 5V6 SOD80 ZMM C ITT	Diode	351-16758	050
D1003	Diode ZD 5V6 SOD80 ZMM C ITT	Diode	351-16758	050
D1241	Diode 0,2A 75V SOD80 LL4148	Diode	351-15015	050
D1242	Diode 0,2A 75V SOD80 LL4148	Diode	351-15015	050
D1379	Diode 0,2A 75V SOD80 LL4148	Diode	351-15015	050
D1381	Diode 0,2A 75V SOD80 LL4148	Diode	351-15015	050
D1631	Diode 0,2A 75V SOD80 LL4148	Diode	351-15015	050
D1650	Diode 0,2A 75V SOD80 LL4148	Diode	351-15015	050
D1668	Diode 0,2A 75V SOD80 LL4148	Diode	351-15015	050
D1669	Diode ZD 20V0 SOD80 ZMM C ITT	Diode	351-22138	050
D1677	Diode 0,2A 75V SOD80 LL4148	Diode	351-15015	050
D1683	Diode 0,2A 75V SOD80 LL4148	Diode	351-15015	050
D1719	Diode 0,2A 75V SOD80 LL4148	Diode	351-15015	050
D1731	Diode ZD 12V0 SOD80 0,5W	Diode	351-17532	050
D1732	Diode 0,2A 75V SOD80 LL4148	Diode	351-15015	050
D1754	Diode 0,2A 75V SOD80 LL4148	Diode	351-15015	050
D1757	Diode 0,2A 75V SOD80 LL4148	Diode	351-15015	050
D1768	Diode 0,2A 75V SOD80 LL4148	Diode	351-15015	050
D1769	Diode 0,2A 75V SOD80 LL4148	Diode	351-15015	050
D1773	Diode 0,2A 75V SOD80 LL4148	Diode	351-15015	050
D1796	Diode ZD 20V0 SOD80 ZMM C ITT	Diode	351-22138	050
D1797	Diode 0,2A 75V SOD80 LL4148	Diode	351-15015	050
D1799	Diode 0,2A 75V SOD80 LL4148	Diode	351-15015	050
D1858	Diode 0,2A 75V SOD80 LL4148	Diode	351-15015	050
D1875	Diode 0,2A 75V SOD80 LL4148	Diode	351-15015	050
D1891	Diode ZD 5V6 SOD80 ZMM C ITT	Diode	351-16758	050
D1997	Diode 0,2A 75V SOD80 LL4148	Diode	351-15015	050
Q1022	Transistor BC857BW SOT323	Transistor	344-28404	050
Q1025	Transistor BC847BW SOT323	Transistor	344-27272	050
Q1026	Transistor BC847BW SOT323	Transistor	344-27272	050
Q1030	Transistor BC847BW SOT323	Transistor	344-27272	050

Signal Board — Art.-Nr. 87934.050

Pos.Nr. Item N°.	Bestell-Bezeichnung	Description	Bestell-Nr. List Part N°.	Var. Var.
Q1036	Transistor BC847BW SOT323	Transistor	344-27272	050
Q1038	Transistor BC847BW SOT323	Transistor	344-27272	050
Q1046	Transistor BC807-25 SOT23	Transistor	344-16064	050
Q1057	Transistor BC817-25W SOT323	Transistor	344-28405	050
Q1094	Transistor BC847BW SOT323	Transistor	344-27272	050
Q1099	Transistor BC847BW SOT323	Transistor	344-27272	050
Q1122	Transistor BC847BW SOT323	Transistor	344-27272	050
Q1132	Transistor BC847BW SOT323	Transistor	344-27272	050
Q1152	Transistor BC847BW SOT323	Transistor	344-27272	050
Q1158	Transistor BC847BW SOT323	Transistor	344-27272	050
Q1160	Transistor BC857BW SOT323	Transistor	344-28404	050
Q1163	Transistor BC857BW SOT323	Transistor	344-28404	050
Q1167	Transistor BC817-25W SOT323	Transistor	344-28405	050
Q1193	Transistor BC847BW SOT323	Transistor	344-27272	050
Q1214	Transistor BC847BW SOT323	Transistor	344-27272	050
Q1219	Transistor BC847BW SOT323	Transistor	344-27272	050
Q1223	Transistor BC847BW SOT323	Transistor	344-27272	050
Q1225	Transistor BC857BW SOT323	Transistor	344-28404	050
Q1229	Transistor BC847BW SOT323	Transistor	344-27272	050
Q1233	Transistor BC847BW SOT323	Transistor	344-27272	050
Q1235	Transistor BC857BW SOT323	Transistor	344-28404	050
Q1239	Transistor BC847BW SOT323	Transistor	344-27272	050
Q1240	Transistor BC857BW SOT323	Transistor	344-28404	050
Q1243	Transistor BC857BW SOT323	Transistor	344-28404	050
Q1252	Transistor BC847BW SOT323	Transistor	344-27272	050
Q1266	Transistor BC847BW SOT323	Transistor	344-27272	050
Q1272	Transistor BC817-25W SOT323	Transistor	344-28405	050
Q1291	Transistor BC847BW SOT323	Transistor	344-27272	050
Q1296	Transistor BC847BW SOT323	Transistor	344-27272	050
Q1320	Transistor BC847BW SOT323	Transistor	344-27272	050
Q1323	Transistor BC847BW SOT323	Transistor	344-27272	050
Q1325	Transistor BC857BW SOT323	Transistor	344-28404	050
Q1346	Transistor BC847BW SOT323	Transistor	344-27272	050
Q1348	Transistor BC847BW SOT323	Transistor	344-27272	050
Q1361	Transistor BC857BW SOT323	Transistor	344-28404	050
Q1363	Transistor BC857BW SOT323	Transistor	344-28404	050
Q1367	Transistor BC857BW SOT323	Transistor	344-28404	050
Q1372	Transistor BC847BW SOT323	Transistor	344-27272	050
Q1373	Transistor BC847BW SOT323	Transistor	344-27272	050
Q1376	Transistor BC847BW SOT323	Transistor	344-27272	050
Q1381	Transistor BC857BW SOT323	Transistor	344-28404	050
Q1416	Transistor BC847BW SOT323	Transistor	344-27272	050
Q1426	Transistor BC847BW SOT323	Transistor	344-27272	050
Q1431	Transistor BC847BW SOT323	Transistor	344-27272	050
Q1436	Transistor BC857BW SOT323	Transistor	344-28404	050
Q1441	Transistor BC847BW SOT323	Transistor	344-27272	050
Q1562	Transistor BC857BW SOT323	Transistor	344-28404	050
Q1567	Transistor BC857BW SOT323	Transistor	344-28404	050

Signal Board — Art.-Nr. 87934.050

Pos.Nr. Item N°.	Bestell-Bezeichnung	Description	Bestell-Nr. List Part N°.	Var. Var.
Q1573	Transistor BC857BW SOT323	Transistor	344-28404	050
Q1591	Transistor BF550 SOT23	Transistor	344-23563	050
Q1673	Transistor BC847BW SOT323	Transistor	344-27272	050
Q1682	Transistor BC847BW SOT323	Transistor	344-27272	050
Q1752	Transistor BC847BW SOT323	Transistor	344-27272	050
Q1758	Transistor BC847BW SOT323	Transistor	344-27272	050
Q1760	Transistor BC847BW SOT323	Transistor	344-27272	050
Q1763	Transistor BC847BW SOT323	Transistor	344-27272	050
Q1766	Transistor BC847BW SOT323	Transistor	344-27272	050
Q1771	Transistor BC847BW SOT323	Transistor	344-27272	050
Q1791	Transistor BC847BW SOT323	Transistor	344-27272	050
Q1796	Transistor BC847BW SOT323	Transistor	344-27272	050
Q1847	Transistor BC847BW SOT323	Transistor	344-27272	050
Q1857	Transistor BC847BW SOT323	Transistor	344-27272	050
Q1866	Transistor BC857BW SOT323	Transistor	344-28404	050
Q1875	Transistor BC857BW SOT323	Transistor	344-28404	050
Q1896	Transistor BC857BW SOT323	Transistor	344-28404	050
Q1961	Transistor BC847BW SOT323	Transistor	344-27272	050
Q1963	Transistor BC847BW SOT323	Transistor	344-27272	050
Q1966	Transistor BC857BW SOT323	Transistor	344-28404	050
Q1967	Transistor BC857BW SOT323	Transistor	344-28404	050
Q1968	Transistor BC857BW SOT323	Transistor	344-28404	050
Q1991	Transistor BC857BW SOT323	Transistor	344-28404	050
Q1997	Transistor BC847BW SOT323	Transistor	344-27272	050

Bedienteil / Control Unit — Art.-Nr. 87506.081

Pos.Nr. Item N°.	Bestell-Bezeichnung	Description	Bestell-Nr. List Part N°.	Var. Var.
	SPULEN	**COILS**		
L8101⚠	Relais 9VDC 350 Ohm	Relay	387-25050	081
T8101⚠	Trafo USA 115V	Power Transformer	490-27748	081
T8101⚠	Trafo USA 115V/8V/1A mit Thermosich	Power Transformer	490-28963	081
	ALLGEM. MECHAN.TEILE	**COMMON MECHANICAL PARTS**		
H8006	Halter/Diode vorm.	Holder	602-84535052	081
	INTEGR.SCHALTUNGEN	**INTEGRATED CIRCUITS**		
I8016	IR-Empfänger (1-Farbstreifen)	Coupler	353-22155Y20	081
I8101	IC 78 L 05 ACP	Integrated Circuit	349-15209020	081
	BUCHSEN/FASSUNGEN	**SOCKETS**		
W8311	Chinch-Buchse rot	Socket	323-17952	081
W8321	Chinch-Buchse weiss	Socket	323-17954	081
W8331	Mini-DIN-Buchse 4-pol	Socket	323-18108	081
W8401	Kopfhörerbuchse (Klinke)	Socket	323-15966	081
	DIODEN	**DIODES**		
D8100	Gleichrichter B 40 C 800-R-A rund	Rectifier	354-27624040	081
D8206	LED 3mm rot Lowcurrent	Coupler	353-22140	081
D8207	LED 3mm grün Lowcurrent	Coupler	353-22141	081

Bedienteil / Control Unit — Art.-Nr. 87506.081

Pos.Nr. Item N°.	Bestell-Bezeichnung	Description	Bestell-Nr. List Part N°.	Var. Var.
	SCHALTER	**SWITCHES**		
S8001	Taster vertikal (kurz)	Switch	467-17895	081
S8002	Taster vertikal (kurz)	Switch	467-17895	081
S8003	Taster vertikal (kurz)	Switch	467-17895	081
S8101	Netzschalter 2-pol.TYP 8013EM	Switch	471-25599	081
	WIDERSTÄNDE	**RESISTORS**		
R8105	10M J 0411	Resistor	367-27946Y05	081
R8301	10M J 0411	Resistor	367-27946Y05	081
	SMD TEILE	**SMD PARTS**		
D8091	Diode 0,2A 75V SOD80 LL4148	Diode	351-15015	081
D8092	Diode 0,2A 75V SOD80 LL4148	Diode	351-15015	081
D8103	Diode 0,2A 75V SOD80 LL4148	Diode	351-15015	081
D8106	Diode 0,2A 75V SOD80 LL4148	Diode	351-15015	081
D8201	Diode ZD 5V6 SOD80 ZMM C ITT	Diode	351-16758	081
D8201	Diode ZD 12V0 SOD80 0,5W	Diode	351-17532	081
D8202	Diode ZD 5V6 SOD80 ZMM C ITT	Diode	351-16758	081
D8202	Diode ZD 12V0 SOD80 0,5W	Diode	351-17532	081
D8204	Diode ZD 5V6 SOD80 ZMM C ITT	Diode	351-16758	081
D8204	Diode ZD 12V0 SOD80 0,5W	Diode	351-17532	081
D8205	Diode ZD 5V6 SOD80 ZMM C ITT	Diode	351-16758	081
D8205	Diode ZD 12V0 SOD80 0,5W	Diode	351-17532	081
D8211	Diode 0,2A 75V SOD80 LL4148	Diode	351-15015	081
D8331	Diode ZD 12V0 SOD80 0,5W	Diode	351-17532	081
D8336	Diode ZD 12V0 SOD80 0,5W	Diode	351-17532	081
D8391	Diode 0,2A 75V SOD80 LL4148	Diode	351-15015	081
D8392	Diode 0,2A 75V SOD80 LL4148	Diode	351-15015	081
D8491	Diode 0,2A 75V SOD80 LL4148	Diode	351-15015	081
D8492	Diode 0,2A 75V SOD80 LL4148	Diode	351-15015	081
Q8002	Transistor BC847B SOT23	Transistor	344-14974	081
Q8111	Transistor BC847B SOT23	Transistor	344-14974	081
Q8114	Transistor BC847B SOT23	Transistor	344-14974	091

Bedienteil / Control Unit — Art.-Nr. 87777.081

Pos.Nr. Item N°.	Bestell-Bezeichnung	Description	Bestell-Nr. List Part N°.	Var. Var.
	VERBINDUNGSLEITUNG	**CONNECTING CABLES**		
N8100	Netzverbindungskabel 1-pol.160lg.	Connecting Cable	171-87516001	081
	SPULEN	**COILS**		
L8101⚠	Relais 9VDC 350 Ohm	Relay	387-25050	081
T8101⚠	Trafo USA 115V	Power Transformer	490-27748	081
T8101⚠	Trafo USA 115V/8V/1A mit Thermosich.	Power Transformer	490-28963	081

Bedienteil / Control Unit — Art.-Nr. 87777.081

Pos.Nr. Item N°.	Bestell-Bezeichnung	Description	Bestell-Nr. List Part N°.	Var. Var.
	ALLGEM.MECHAN.TEILE	**COMMON MECHANICAL PARTS**		
H8006	Halter/Diode VORM.	Holder	602-84535055	081
	INTEGR.SCHALTUNGEN	**INTEGRATED CIRCUITS**		
I8016	IR-Empfänger (1-Farbsteifen)	Coupler	353-22155Y20	081
I8101	IC 78 L 05 ACP	Integrated Circuit	349-15209020	081
	DIODEN	**DIODES**		
D8100	Gleichrichter B 40 C 800-R-A rund	Rectifier	354-27624040	081
D8206	LED 3mm rot Lowcurrent	Coupler	353-22140	081
D8207	LED 3mm grün Lowcurrent	Coupler	353-22141	081
	SCHALTER	**SWITCHES**		
S8001	Taster vertikal (kurz)	Switch	467-17895	081
S8002	Taster vertikal (kurz)	Switch	467-17895	081
S8003	Taster vertikal (kurz)	Switch	467-17895	081
S8101	Netzschalter 2-pol.TYP 8013EM	Switch	471-25599	081
	WIDERSTÄNDE	**RESISTORS**		
R8301	10M J 0411	Resistor	367-27946Y05	081
R8302	10M J 0411	Resistor	367-27946Y05	081
	SMD TEILE	**SMD PARTS**		
D8091	Diode 0,2A 75V SOD80 LL4148	Diode	351-15015	081
D8092	Diode 0,2A 75V SOD80 LL4148	Diode	351-15015	081
D8103	Diode 0,2A 75V SOD80 LL4148	Diode	351-15015	081
D8106	Diode 0,2A 75V SOD80 LL4148	Diode	351-15015	081
D8201	Diode ZD 5V6 SOD80 ZMM C ITT	Diode	351-16758	081
D8201	Diode ZD 12V0 SOD80 0,5W	Diode	351-17532	081
D8202	Diode ZD 5V6 SOD80 ZMM C ITT	Diode	351-16758	081
D8202	Diode ZD 12V0 SOD80 0,5W	Diode	351-17532	081
D8204	Diode ZD 5V6 SOD80 ZMM C ITT	Diode	351-16758	081
D8204	Diode ZD 12V0 SOD80 0,5W	Diode	351-17532	081
D8205	Diode ZD 5V6 SOD80 ZMM C ITT	Diode	351-16758	081
D8205	Diode ZD 12V0 SOD80 0,5W	Diode	351-17532	081
D8211	Diode 0,2A 75V SOD80 LL4148	Diode	351-15015	081
D8331	Diode ZD 12V0 SOD80 0,5W	Diode	351-17532	081
D8336	Diode ZD 12V0 SOD80 0,5W	Diode	351-17532	081
D8391	Diode 0,2A 75V SOD80 LL4148	Diode	351-15015	081
D8392	Diode 0,2A 75V SOD80 LL4148	Diode	351-15015	081
D8491	Diode 0,2A 75V SOD80 LL4148	Diode	351-15015	081
D8492	Diode 0,2A 75V SOD80 LL4148	Diode	351-15015	081
Q8002	Transistor BC847B SOT23	Transistor	344-14974	081
Q8111	Transistor BC847B SOT23	Transistor	344-14974	081
Q8114	Transistor BC847B SOT23	Transistor	344-14974	081

Gehäuse / Cabinet — Art.-Nr. 87076.084/085

Pos.Nr. Item N°.	Bestell-Bezeichnung	Description	Bestell-Nr. List Part N°.	Var. Var.
	BAUGRUPPEN	**UNITS**		
U8211	Bedienteil kpl. Planus A2400	Print Circuit Board	396-87777081	
	VERBINDUNGSLEITUNG	CONNECTING CABLES		
N8102	Netzkabel USA m. Drossel 3200lg	Power Cord	170-87684002	
	KNÖPFE	**BUTTONS**		
150	Knopf/Netzsch. schw.	Button	682-84569102	
170	Knopf/Taster schwarz	Button	682-85081111	
	GEHÄUSETEILE	**CABINET MOUNTING**		
30	Träger / Bedien. schwarz	Supporter	541-87076702	084
30	Träger / Bedien. USA arktis	Supporter	541-87076703	085
40	Klappe / Bedien. schwarz	Cover Plate	706-86737002	084
40	Klappe / Bedien. hellgrau metallic	Cover Plate	706-86737003	085
50	Klemmhalter für Bedienschublade	Holder	602-16603	
60	Fenster/Infra	Window	666-86736001	

Bedienteil / Control Unit — Art.-Nr. 87819.081

Pos.Nr. Item N°.	Bestell-Bezeichnung	Description	Bestell-Nr. List Part N°.	Var. Var.
	VERBINDUNGSLEITUNG	**CONNECTING CABLES**		
N8100	Netzverbindungskabel 1-pol.160lg.	Connecting Cable	171-87516001	081
	SPULEN	**COILS**		
L8101⚠	Relais 9VDC 350 Ohm	Relay	387-25050	081
T8101⚠	Trafo USA 115V	Power Transformer	490-27748	081
T8101⚠	Trafo USA 115V/8V/1A mit Thermosich.	Power Transformer	490-28963	081
	ALLGEM.MECHAN.TEILE	**COMMON MECHANICAL PARTS**		
H8006	Halter/Diode vorm.	Holder	602-84535052	081
	INTEGR.SCHALTUNGEN	**INTEGRATED CIRCUITS**		
I8016	IR-Empfänger (1-Farbstreifen)	Coupler	353-22155Y20	081
I8101	IC 78 L 05 ACP	Integrated Circuit	349-15209020	081
	BUCHSEN/FASSUNGEN	**SOCKETS**		
W8351	Kombibuchse	Socket	323-28586	081
	DIODEN	**DIODES**		
D8101	Gleichrichter B 40 C 800-R-A rund	Rectifier	354-27624040	081
D8206	LED 3mm rot Lowcurrent	Coupler	353-22140	081
D8207	LED 3mm grün Lowcurrent	Coupler	353-22141	081
	SCHALTER	**SWITCHES**		
S8001	Taster (lang)	Switch	467-28135	081
S8002	Taster (lang)	Switch	467-28135	081
S8003	Taster (lang)	Switch	467-28135	081
S8101	Netzschalter 2-pol. TYP 8013EM	Switch	471-25599	081

Bedienteil / Control Unit — Art.-Nr. 87819.081

Pos.Nr. Item N°.	Bestell-Bezeichnung	Description	Bestell-Nr. List Part N°.	Var. Var.
	ALLGEM.MECHAN.TEILE	**COMMON MECHANICAL PARTS**		
	WIDERSTÄNDE	**RESISTORS**		
R8301	10M J 0411	Resistor	367-27946Y05	081
R8302	10M J 0411	Resistor	367-27946Y05	081
	SMD TEILE	**SMD PARTS**		
D8011	Diode 0,2A 75V SOD80 LL4148	Diode	351-15015	081
D8012	Diode 0,2A 75V SOD80 LL4148	Diode	351-15015	081
D8103	Diode 0,2A 75V SOD80 LL4148	Diode	351-15015	081
D8106	Diode 0,2A 75V SOD80 LL4148	Diode	351-15015	081
D8201	Diode ZD 5V6 SOD80 ZMM C ITT	Diode	351-16758	081
D8201	Diode ZD 12V0 SOD80 0,5W	Diode	351-17532	081
D8202	Diode ZD 5V6 SOD80 ZMM C ITT	Diode	351-16758	081
D8202	Diode ZD 12V0 SOD80 0,5W	Diode	351-17532	081
D8204	Diode ZD 5V6 SOD80 ZMM C ITT	Diode	351-16758	081
D8204	Diode ZD 12V0 SOD80 0,5W	Diode	351-17532	081
D8205	Diode ZD 5V6 SOD80 ZMM C ITT	Diode	351-16758	081
D8205	Diode ZD 12V0 SOD80 0,5W	Diode	351-17532	081
D8211	Diode 0,2A 75V SOD80 LL4148	Diode	351-15015	081
D8331	Diode ZD 12V0 SOD80 0,5W	Diode	351-17532	081
D8336	Diode ZD 12V0 SOD80 0,5W	Diode	351-17532	081
D8391	Diode 0,2A 75V SOD80 LL4148	Diode	351-15015	081
D8392	Diode 0,2A 75V SOD80 LL4148	Diode	351-15015	081
D8491	Diode 0,2A 75V SOD80 LL4148	Diode	351-15015	081
D8492	Diode 0,2A 75V SOD80 LL4148	Diode	351-15015	081
Q8002	Transistor BC847B SOT23	Transistor	344-14974	081
Q8111	Transistor BC847B SOT23	Transistor	344-14974	081
Q8114	Transistor BC847B SOT23	Transistor	344-14974	081

Bildrohrplatte / CRT Board — Art.-Nr. 87833.053-055

Pos.Nr. Item N°.	Bestell-Bezeichnung	Description	Bestell-Nr. List Part N°.	Var. Var.
	SPULEN/LAUTSPRECHER	**COILS,SPEAKERS**		
L226	Dr. 2x 33U DK31 (931 112/13)	Choke	298-24612	
L366	Dr. 4U7 K LAL03VT/VB T.YUD.	Choke	298-18104020	
	ALLGEM.MECHAN.TEILE	**COMMON MECHANICAL PARTS**		
40	Montageclip 6mm	Spring	739-10230	
	INTEGR.SCHALTUNGEN	**INTEGRATED CIRCUITS**		
I370	IC TDA6120N2	Integrated Circuit	349-27260	
I380	IC TDA6120N2	Integrated Circuit	349-27260	
I390	IC TDA6120N2	Integrated Circuit	349-27260	

Bildrohrplatte / CRT Board — Art.-Nr. 87833.053-055

Pos.Nr. Item N°.	Bestell-Bezeichnung	Description	Bestell-Nr. List Part N°.	Var. Var.
	BUCHSEN/FASSUNGEN	**SOCKETS**		
20	Bildrohrfassung	Socket	320-23997	054
20	Bildrohrfassung	Socket	320-23997	055
20	Bildrohrfassung	Socket	320-24766	053
	TRANSISTOREN	**TRANSISTORS**		
Q221	BC640	Transistor	346-25720020	
Q222	BC639	Transistor	346-75622020	
	DIODEN	**DIODES**		
D351	SD 103C Schottky-Diode	Diode	352-17741	
D367	1 N 4007	Diode	352-79585	
	KONDENSATOREN	**CAPACITORS**		
C154	Elko 22µ S 250V R5 10x22 360-8	Electrolyt Capacitor	360-11762020	
C360	10N M2000V R7,5	Capacitor	357-21868	
C364	100N K 250V R5	Capacitor	359-26910020	
C366	Elko 22µ S 250V R5 10x22 360-8	Electrolyt Capacitor	360-11762020	
C367	Elko 22µ S 250V R5 10x22 360-8	Electrolyt Capacitor	360-11762020	
C368	1N M1000V R5 D<9	Capacitor	357-73102020	
C370	100N K 250V R5	Capacitor	359-26910020	
C380	100N K 250V R5	Capacitor	359-26910020	
C390	100N K 250V R5	Capacitor	359-26910020	
	WIDERSTÄNDE	**RESISTORS**		
10	18K F 0414	Resistor	367-27342	
R153⚠	3R3 J SI 0207 0,50W	Resistor	366-27701	
R154⚠	3R3 J SI 0207 0,50W	Resistor	366-27701	
R329⚠	33R K SI 0207 0,5 W	Resistor	366-20795010	
R364	10R J 0207 LV366-1	Resistor	366-77101	
R367	1M J 0207 LV366-1	Resistor	366-28054	
R368	1K5 K 0411	Resistor	365-77586	
R369	10K K 0411	Resistor	365-77587	
R374	18K F 0414 geschnitten	Resistor	367-27342Y10	
R378	220R 10% 0411 SC1/2	Resistor	365-27261	
R384	18K F 0414 geschnitten	Resistor	367-27342Y10	
R388	220R 10% 0411 SC1/2	Resistor	365-27261	
R394	18K F 0414 geschnitten	Resistor	367-27342Y10	
R398	220R 10% 0411 SC1/2	Resistor	365-27261	
	SMD TEILE	**SMD PARTS**		
D218	Diode BA 592 SOD323	Diode	351-25810	
D219	Diode BA 592 SOD323	Diode	351-25810	
D322	Diode 0,2A 75V SOD80 LL4148	Diode	351-15015	
D341	Diode 0,2A 75V SOD80 LL4148	Diode	351-15015	
D342	Diode 0,2A 75V SOD80 LL4148	Diode	351-15015	
D371	Diode 0,2A 75V SOD80 LL4148	Diode	351-15015	
D377	Diode BAV103 Implotec-Diode	Diode	351-27246	
D378	Diode BAV103 Implotec-Diode	Diode	351-27246	
D381	Diode 0,2A 75V SOD80 LL4148	Diode	351-15015	
D387	Diode BAV103 Implotec-Diode	Diode	351-27246	

Bildrohrplatte / CRT Board — Art.-Nr. 87833.053-055

Pos.Nr. Item N°.	Bestell-Bezeichnung	Description	Bestell-Nr. List Part N°.	Var. Var.
D388	Diode BAV103 Implotec-Diode	Diode	351-27246	
D391	Diode 0,2A 75V SOD80 LL4148	Diode	351-15015	
D397	Diode BAV103 Implotec-Diode	Diode	351-27246	
D398	Diode BAV103 Implotec-Diode	Diode	351-27246	
Q157	Transistor BC856BW SOT323	Transistor	344-28629	
Q161	Transistor BC847BW SOT323	Transistor	344-27272	
Q162	Transistor BC857BW SOT323	Transistor	344-28404	
Q171	Transistor BC847BW SOT323	Transistor	344-27272	
Q172	Transistor BC857BW SOT323	Transistor	344-28404	
Q181	Transistor BC847BW SOT323	Transistor	344-27272	
Q182	Transistor BC857BW SOT323	Transistor	344-28404	
Q204	Transistor BC847BW SOT323	Transistor	344-27272	
Q211	Transistor BC857BW SOT323	Transistor	344-28404	
Q213	Transistor BC847BW SOT323	Transistor	344-27272	
Q216	Transistor BC847BW SOT323	Transistor	344-27272	
Q321	Transistor BC847BW SOT323	Transistor	344-27272	
Q326	Transistor BFN23 SOT23	Transistor	344-15350	
Q341	Transistor BC857BW SOT323	Transistor	344-28404	
Q343	Transistor BC847BW SOT323	Transistor	344-27272	
Q362	Transistor BC857BW SOT323	Transistor	344-28404	

Rotation Panel — Art.-Nr.: 87281.050/051

Pos.Nr. Item N°.	Bestell-Bezeichnung	Description	Bestell-Nr. List Part N°.
	INTEGR.SCHALTUNGEN	**INTEGRATED CIRCUITS**	
I0001	LM 2902-M	Integrated Circuit	350-19705
	TRANSISTOREN	**TRANSISTORS**	
	BC 547 B	Transistor	346-74983.020
	BC 557 B	Transistor	346-74878.020
	SPEZIALTEILE	**SPECIAL PARTS**	
W0001	Stiftleiste 3-pol. schwarz	Contact Ledge	326-26651
W0031	Stiftwanne 2-pol. grün	Contact Cabinet	326-26769

Entmagnetisierung / Degaussing Switch — Art.-Nr. 87862.050

Pos.Nr. Item N°.	Bestell-Bezeichnung	Description	Bestell-Nr. List Part N°.	Var. Var.
	INTEGR.SCHALTUNGEN	**INTEGRATED CIRCUITS**		
I711⚠	IC PC3SF21YTZB DIP6	Integrated Circuit	349-28561	050
	DIODEN	**DIODES**		
10	Triac BTA08-600 TO220	Thyristor	348-26891	050
Y711	Triac BTA08-600A OD.S	Thyristor	348-26891Y20	050
	WIDERSTÄNDE	**RESISTORS**		
10	220R J 0207	Resistor	366-15679	050
R706	3R DUO-PTC Wid	PTC Resistor	372-27970	050
R711	1K5 J 0414 1W R15	Resistor	367-20657	050
R712	1K5 J 0414 1W R15	Resistor	367-20657	050
R726	220R J 0207	Resistor	366-15679Y01	050

VGA IR Adapter — Art.-Nr. 87717.060

Pos.Nr. Item N°.	Bestell-Bezeichnung	Description	Bestell-Nr. List Part N°.	Var. Var.
	INTEGR.SCHALTUNGEN	**INTEGRATED CIRCUITS**		
I811	ICMOS 74HCT 86 SO14	Integrated Circuit	350-16065	060
I891	ICMOS 74HCT 00 SO14	Integrated Circuit	350-15555	060
I896	IC SN74LS92D SO14 TTL	Integrated Circuit	350-28484	060
	BUCHSEN/FASSUNGEN	**SOCKETS**		
W801	Subminiatur-Buchse 15-pol.	Socket	323-28415	060
W881	Kopfhörerbuchse 3,5mm Mono	Socket	323-28672	060
	QUARZE/FILTER	**QUARTZES**		
X893	Piezo Filter 429,0 KHz	Ceramic Filter	386-18622	060
	WIDERSTÄNDE	**RESISTORS**		
10	33R J 0207	Resistor	366-22944	060
R882⚠	33R geschnitten RM10	Resistor	366-22944Y01	060
	SMD TEILE	**SMD PARTS**		
Q881	Transistor BC807-25 SOT23	Transistor	344-16064	060

Frequenzweiche / Cross-over Network — Art.-Nr. 85729.068

Pos.Nr. Item N°.	Bestell-Bezeichnung	Description	Bestell-Nr. List Part N°.	Var. Var
	WIDERSTÄNDE	**RESISTORS**		
R 10	10M J 0411	Resistor	367-19664Y03	068
	KONDENSATOREN	**CAPACITORS**		
C 01	4µ7 K 50V 10x20	Electrolytic Capacitor	360-25592Y08	068
C 02	22µ K 50V 13x27	Electrolytic Capacitor	360-25592Y17	068
	SPULEN	**COILS**		
L 10	1m8 LV298-22671	Coil	367-22671	068
	SPEZIALTEILE	**SPECIAL PARTS**		
40	Klebefuß 40x4	Foam Plastics Ledge	411-18668	068
N 03	Schaltleitung 1-pol. 350 lg. violett	Connecting Cable	171-88123053	068
N 04	Schaltleitung 1-pol. 350 lg. braun	Connecting Cable	171-88123054	068
N 05	Kabelbaum 3-pol.130 lg. schwarz	Connecting Cable	171-86706052	068
N 08	Kabelbaum 2-pol.450 lg. schwarz	Connecting Cable	171-86705051	068
N 10	Masseleitung 1-pol. 550 lg. braun	Connecting Cable	171-88123054	068
W 01	Stiftwanne 2-pol. schwarz, stehend	Contact Ledge	326-79604	068

Frequenzweiche / Cross-over Network — Art.-Nr. 85729.069

Pos.Nr. Item N°.	Bestell-Bezeichnung	Description	Bestell-Nr. List Part N°.	Var. Var
	WIDERSTÄNDE	**RESISTORS**		
R 01	4R7 K 5,0 W	Resistor	368-25590	069
KONDENSATOREN		CAPACITORS		
C 01	3µ3 K 50V 10x20	Electrolytic Capacitor	360-25591Y20	069
	SPULEN	**COILS**		
L 01	0m56	Coil	298-25645	069
	SPEZIALTEILE	**SPECIAL PARTS**		
10	Fastonsteckhülse 160 173 2 AMP	Spring Contact	332-13280	069
10	Fastonsteckhülse 160 173 2 AMP	Spring Contact	332-13280	069
N 03	Schaltleitung 1-pol.300 lg. blau	Connecting Cable	171-86489	069
N 04	Schaltleitung 1-pol.300 lg. rot	Connecting Cable	171-86487	069
N 05	Kabelbaum 3-pol.130 lg. schwarz	Connecting Cable	171-86706051	069
W 01	Stiftwanne 2-pol. schwarz,stehend	Contact Ledge	326-79604	069

IR-Fernbedienung / Infrared remote control Artikel-Nr. 87000.063

Pos. Nr. Item N°.	Bestell-Bezeichnung	Description	Bestell-Nr. List Part N°.	Var. Var.
	INTEGR. SCHALTUNGEN	**INTEGRATED CIRCUITS**		
I171	IC LM 358 SMD	Integrated Circuit	350-21521	050
	GEBER-ERSATZTEILE	**SPARE PARTS FOR TRANSMITTER**		
20	Batteriefeder 1-fach	Spring	739-85278001	050
20	Batteriefeder	Spring	739-87217001	050
C121	Elko 220µ M 6V	Electrolytic Capacitor	362-25508	050
D117	LED LG T679 SMD	Coupler	353-27021	050
D118	LED LG T679 SMD	Coupler	353-27021	050
D121	LED F.D.SFH 4515	Coupler	353-27024	050
D176	Fototransistor	Coupler	353-28307	050
I101	ICMOS PIC16LC62A-04/SS V.01	Integrated Circuit	350-28186	050
I151	ICMOS EEPROM 24CL16B/5N V.01	Integrated Circuit	350-28189	050
Q121	Transistor BCX17 SOT23	Transistor	344-25509	050
Q126	Transistor BC857B SOT23	Transistor	344-14979	050
X111	Keramicresonator 4MHz mit Kond.	Ceramic Filter	386-28191	050
	SMD TEILE	**SMD PARTS**		
D181	Diode LL4148 SOD80	Diode	351-15015	050
D182	Diode 1PS76SB21 SOD323	Diode	351-28299	050
Q181	Transistor BC847B SOT23	Transistor	344-14974	050

NOTES

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Scottsdale,
Arizona
USA 85260-1732
Tel. 602 - 9983400
Fax 602 - 9514404

Bag for

Basic Board (Schematic & PCB)

Signal Board (Schematic & PCB)

Oscillograms

Naming:	LOEWE.
A2400	
Signal Board	
Code-Teile-Nr.: 396-87934.050	Index B
Datum: 02.08. 2000	

Final stage stereo

Hyperband tuner

Hor. final stage

Power supply

Supply voltage potential

Set potential (off ground)

Vert. deflection

O/W-Korrektur
E/W-correction

Fokusblock

FLYBACK GENERATOR

to Signal Board W1731

to Signal Board W1311

to Signal Board W1003

to Control unit

to Degaussing

W-TRAFO

SAT
only with tuner MP

W3152 CRT-PCB

Oscillograms

ch1: pkpk= 13.7 V ch1: T = 13.2µs
5.00V/Div DC
5.00µs/Div
MP1

ch1: pkpk= 25.7 V ch1: T = 20.0ms
10.0V/Div DC
5.00ms/Div
MP9

ch1: pkpk= 519 V ch1: T = 13.2µs
100V/Div DC
5.00µs/Div
MP2

ch1: pkpk= 47.0 V ch1: T = 20.0ms
10.0V/Div DC
5.00ms/Div
MP10

ch1: pkpk= 58.6 V ch1: T = 32.0µs
20.0V/Div DC
10.0µs/Div
MP3

ch1: pkpk= 1.39 V ch1: T = 20.1ms
500mV/Div DC
5.00ms/Div
MP11

ch1: T = 5.77µs
1.00V/Div DC
10.0µs/Div
MP4

ch1: pkpk= 1.65 V ch1: T = 20.0ms
500mV/Div DC
5.00ms/Div
MP12

ch1: pkpk= 1.12kV ch1: T = 32.0µs
200V/Div DC
10.0µs/Div
MP5

ch1: pkpk= 1.89 V ch1: T = 19.9ms
500mV/Div DC
5.00ms/Div
MP13

ch1: pkpk= 20.3 V ch1: T = 32.0µs
5.00V/Div DC
10.0µs/Div
MP6

ch1: pkpk= 995mV ch1: T = 20.1ms
500mV/Div DC
5.00ms/Div
MP14

ch1: pkpk= 17.7 V ch1: T = 20.1ms
5.00V/Div DC
5.00ms/Div
MP7

ch1: pkpk= 2.37 V ch1: T = 32.0µs
500mV/Div DC
10.0µs/Div
MP15

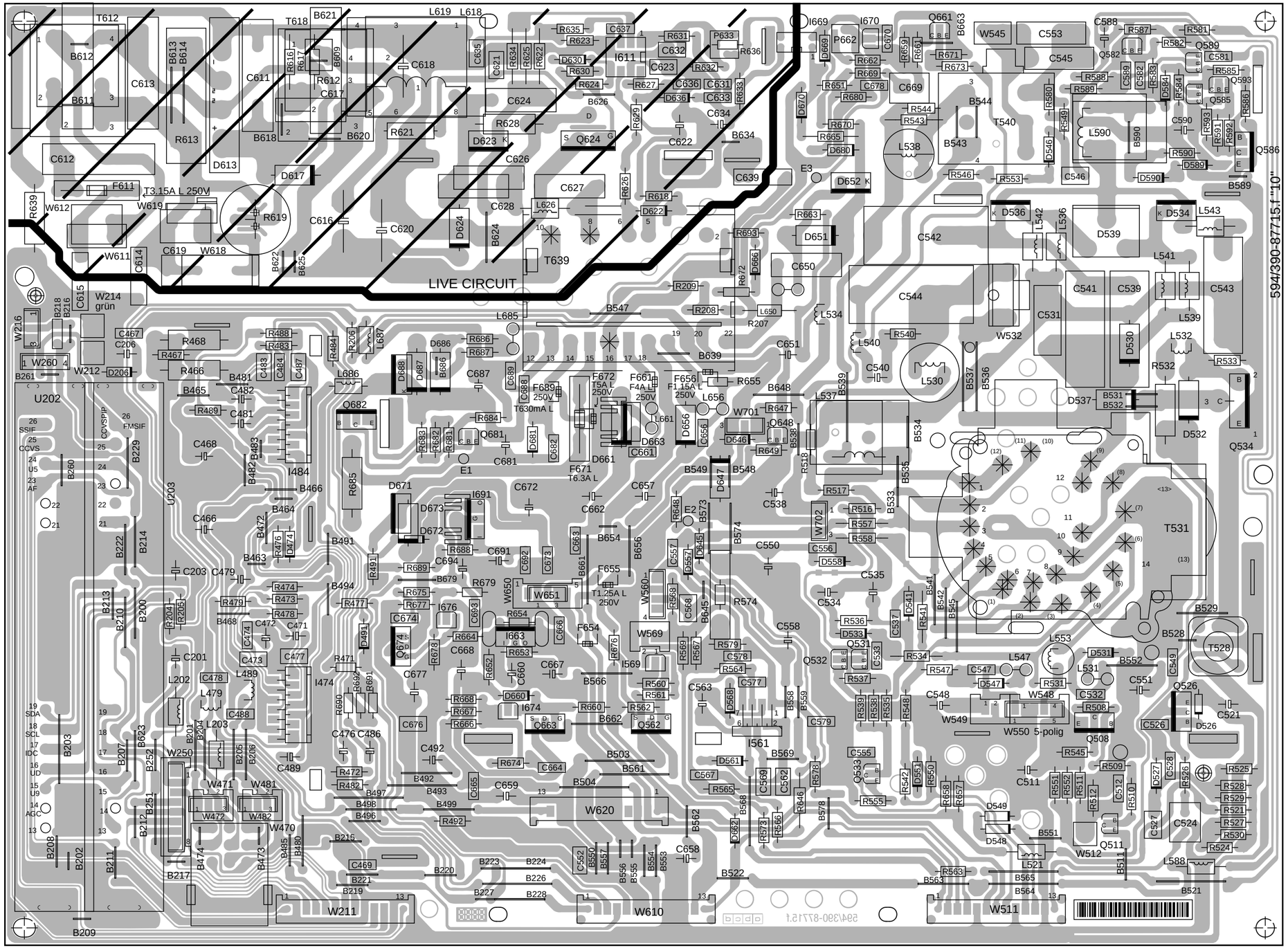
ch1: pkpk= 27.3 V ch1: T = 20.0ms
10.0V/Div DC
5.00ms/Div
MP8

UB = 136V⁽ᵎᵎ⁾/150V*) 32" WSSF/16:9
UB = 142V⁽ᵎᵎ⁾/156V*) 33" FS/4:3
UB = 146V⁽ᵎᵎ⁾/160V*) 32" WSRF/16:9
UV+ = +13.0V / +14.5V*)
UV- = -13.0V / -14.5V*)
UG2 = 760V
UNF+ = +13.5V
UNF- = -13.5V
UVID = 210V
UMUTE = +7V
⁽ᵎ⁾ = NTSC Mode
*) = 1080i Mode

= EW GND
= Defl GND
= HDGND
= HPGND
= SEKGND
= Primär GND
= Analog GND
= NF GND

Naming: Basic Board A2400
Variante: 071-073-074
Code/Part-N°.: 396-87715.
Index: f
Date: 26.07.2000

LOEWE.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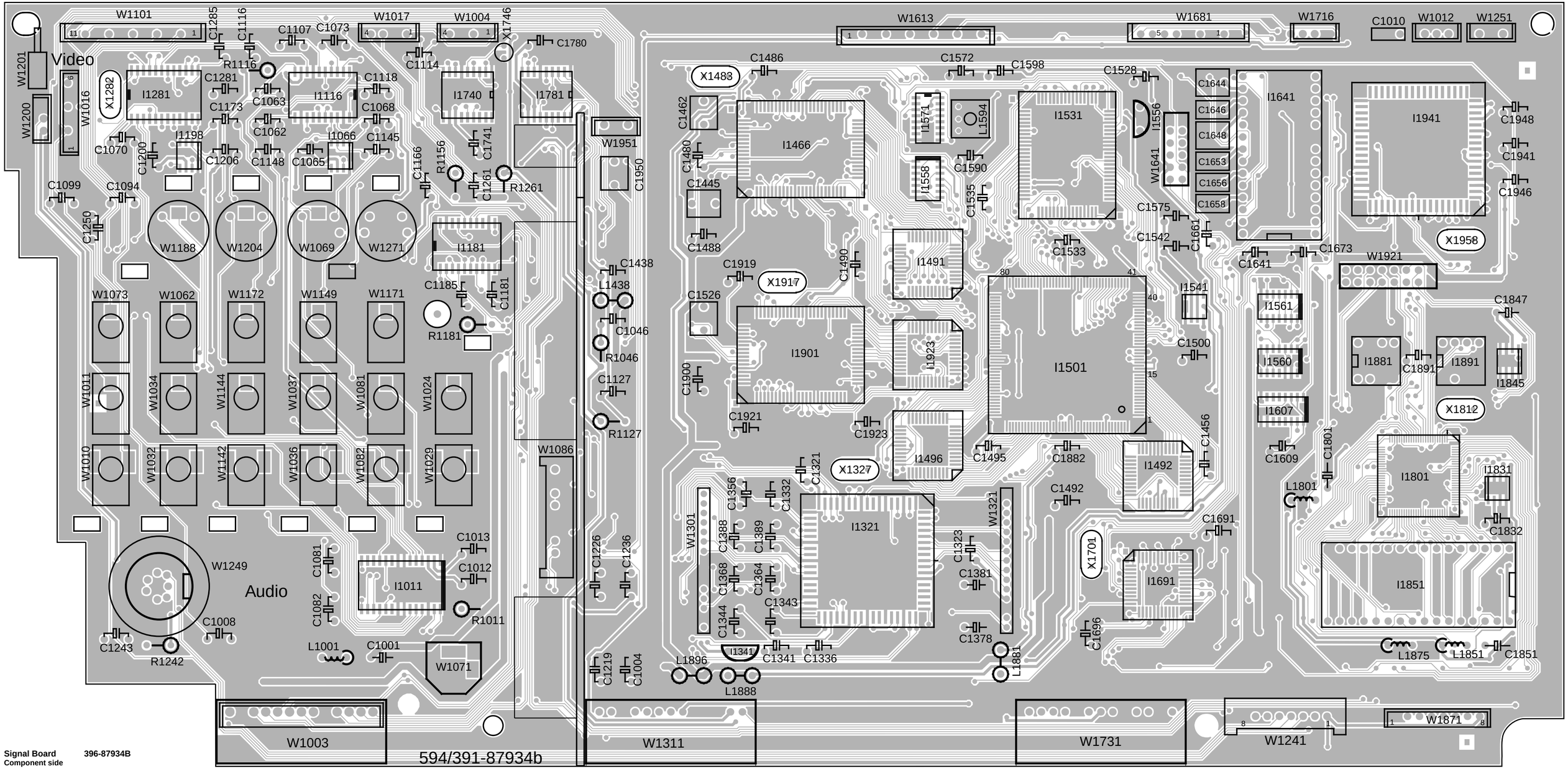
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Audio
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C1008
C1243
R1242
C1081
C1082
C1013
C1012
R1011
L1001
C1001
W1071
C1226
C1236
C1219
C1004
W1003
W1311
W1731
W1241
W1871
X1488
C1486
C1462
C1480
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C1572
C1598
C1528
C1590
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C1575
C1542
C1533
C1919
X1917
C1526
C1900
C1921
C1923
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X1812
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C1661
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C1653
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C1658
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C1941
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I1801
I1831
I1851
L1896
L1881
L1875
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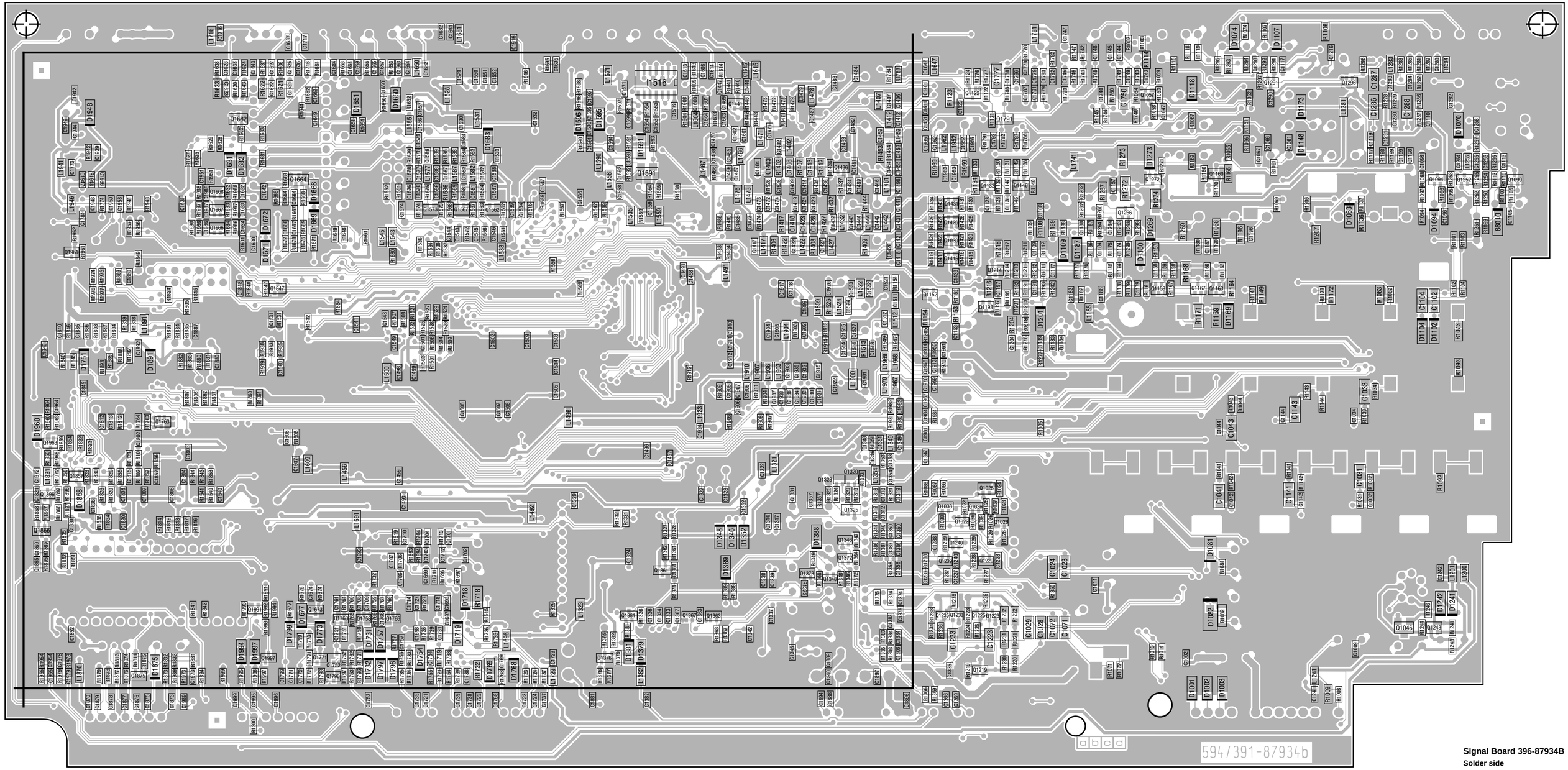
W1871
Signal Board
Component side
396-87934B
594/391-87934b



Signal Board 396-87934B
Solder side